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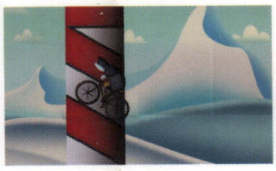

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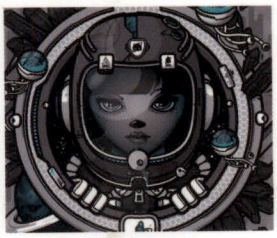

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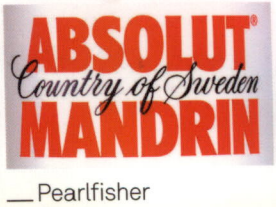


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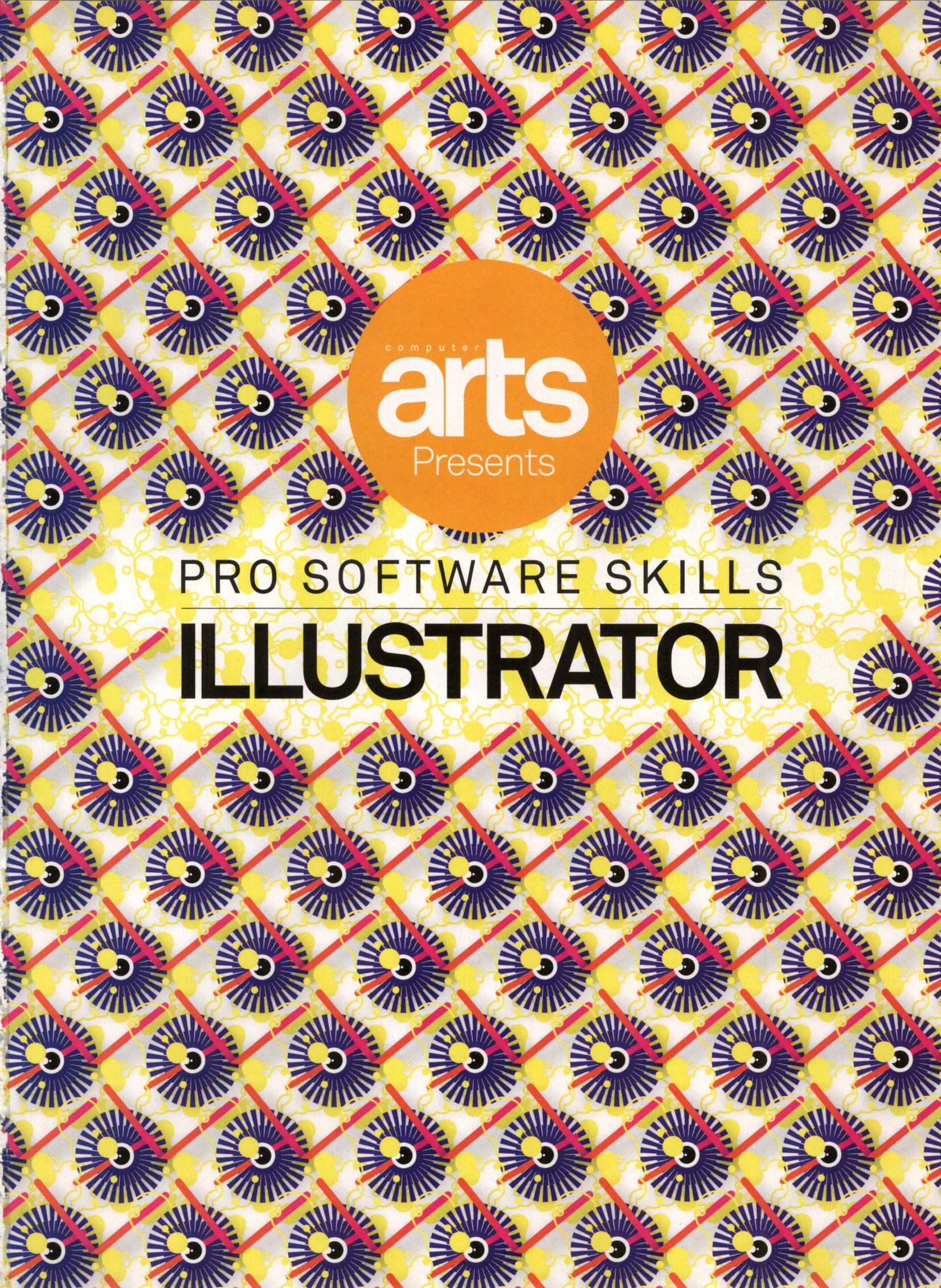
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**Welcome to the third of our Pro Software Skills specials.** If you haven't already got hold of the Photoshop and InDesign editions, don't miss out – for Creative Suite pros who are serious about design they make an invaluable set, and are guaranteed to help you work smarter and faster in your daily design activity. The final part, dedicated to After Effects, is coming up next.

Rather like Photoshop, Illustrator is a versatile beast that plays an integral part in many different types of professional workflow – from illustration and character design through to custom typography, logo design, packaging and more. Whether you currently use it for one, two or even all of the above in your daily work, you'll find plenty of pro technique and advice over the following pages to help you push the program harder and produce better work, more efficiently.

Our Pro Guides to paths, shapes, symbols, artboards and effects will enhance your knowledge of the fundamental building blocks of Illustrator, while 150 expert tips for better illustration, logo design and packaging help put it all in context. There's plenty of technique and inspiration packed in too.

Enjoy the issue, and please drop us a line if this guide has made a difference to your Illustrator workflow...

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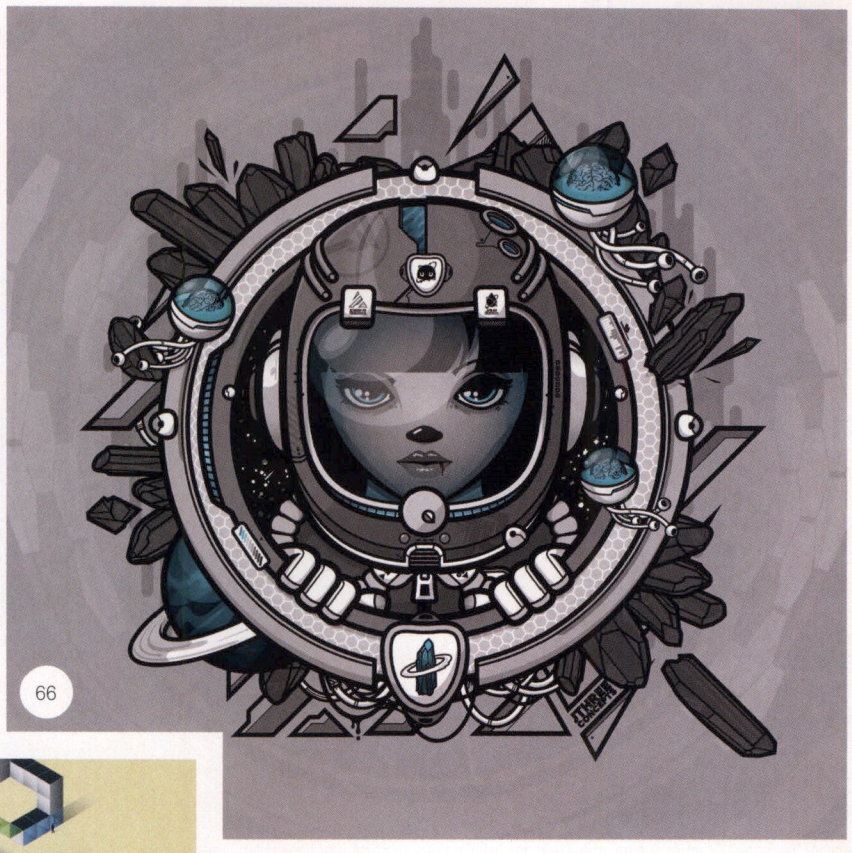
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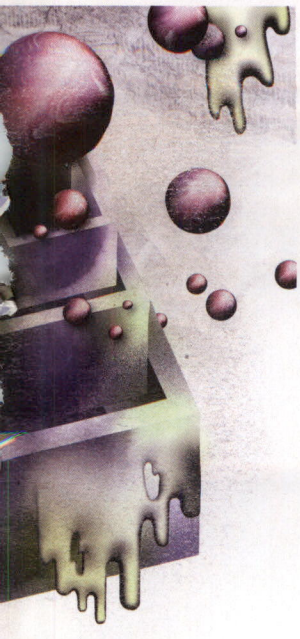

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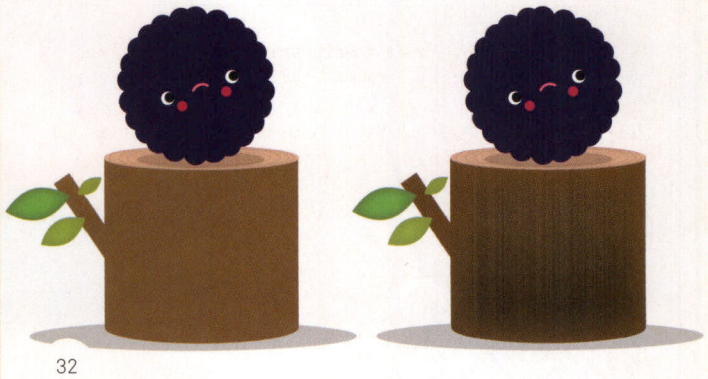
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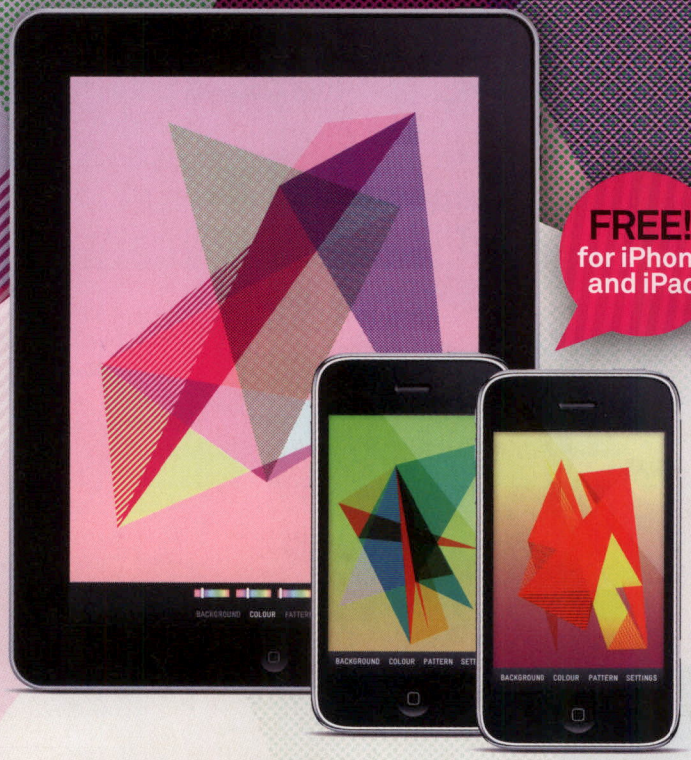


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Illustration icons, character creators, logo design luminaries and packaging pioneers. Introducing the talented creatives behind *Pro Software Skills: Illustrator*

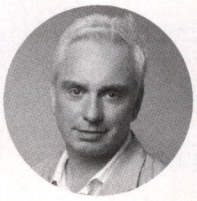
**Steven Bonner**
With clients including *Wired*, *GQ* and Cadbury's, Scottish illustrated type supremo Bonner is profiled on page 38 – and also contributes some expert advice to our extended tips piece on page 52.

**Falko Ohlmer**
Opening each of the '50 tips' features in *Pro Software Skills: Illustrator* are stunning illustrations from this Hamburg-based creative. The first piece accompanies the illustration tips, page 52.

**Bill Gardner**
Founder of LogoLounge, principal of Kansas-based studio Gardner Design and a globally renowned logo design expert, Gardner is profiled on page 82, and also shares his top five logo trends.

**Karan Singh**
Melbourne-based illustrator Karan Singh created the striking vector illustrations that introduce our five pro guides to paths, shapes, symbols, artboards and effects, which kick off on page 8.

**Jared Nickerson**
Founder of the Blood Sweat Vector collective, this Seattle-based character illustrator has worked with the likes of Nike, Coca-Cola, Virgin and Microsoft. He chats through his techniques on page 66.



**Pearlfisher**
We profile this leading London studio, which has created a vast range of packaging for high-end brands such as Waitrose, Green & Blacks, Fortnum & Mason and Absolut Vodka, on page 98.

**Radim Malinic**
You'll find a selection of inspiring Illustrator work from this prolific freelance designer on your cover disc. Malinic also provides some expert guidance to improve your workflow and illustration skills.

**Siggi Odds**
Icelandic illustrator Sigurður Oddsson, AKA Siggi Odds, walks through his favoured technique for adding shadows and highlights to your work using Illustrator's Inner Glow effect on page 62.

**Honey Creative**
Head of production Duncan Eldridge demonstrates best practice for preparing a packaging dieline for production on page 94. Honey Creative also contributes to our pro packaging tips (page 88).

**Fernando Volken-Togni**
Produce a vibrant and versatile repeat pattern that can be translated across many different creative applications with pro advice from this vector illustrator, based in Porto Alegre, southern Brazil.

**Jonny Costello**
Senior designer at Birmingham design studio Fluid, Costello brings his experience of working with multiple artboards and grids in Illustrator to our in-depth guide about exactly that.

**Zutto**
This Russia-based freelance illustrator and character specialist contributes some of her vector workflow expertise to our extended illustration tips feature, which begins on page 52.

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**Cover** Precision Special Gloss FSC Certified 250gsm
**Typeface** Akkurat

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**Next issue – *Pro Software Skills: After Effects* – on sale** 27 September 2011

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## THE PRO'S GUIDE

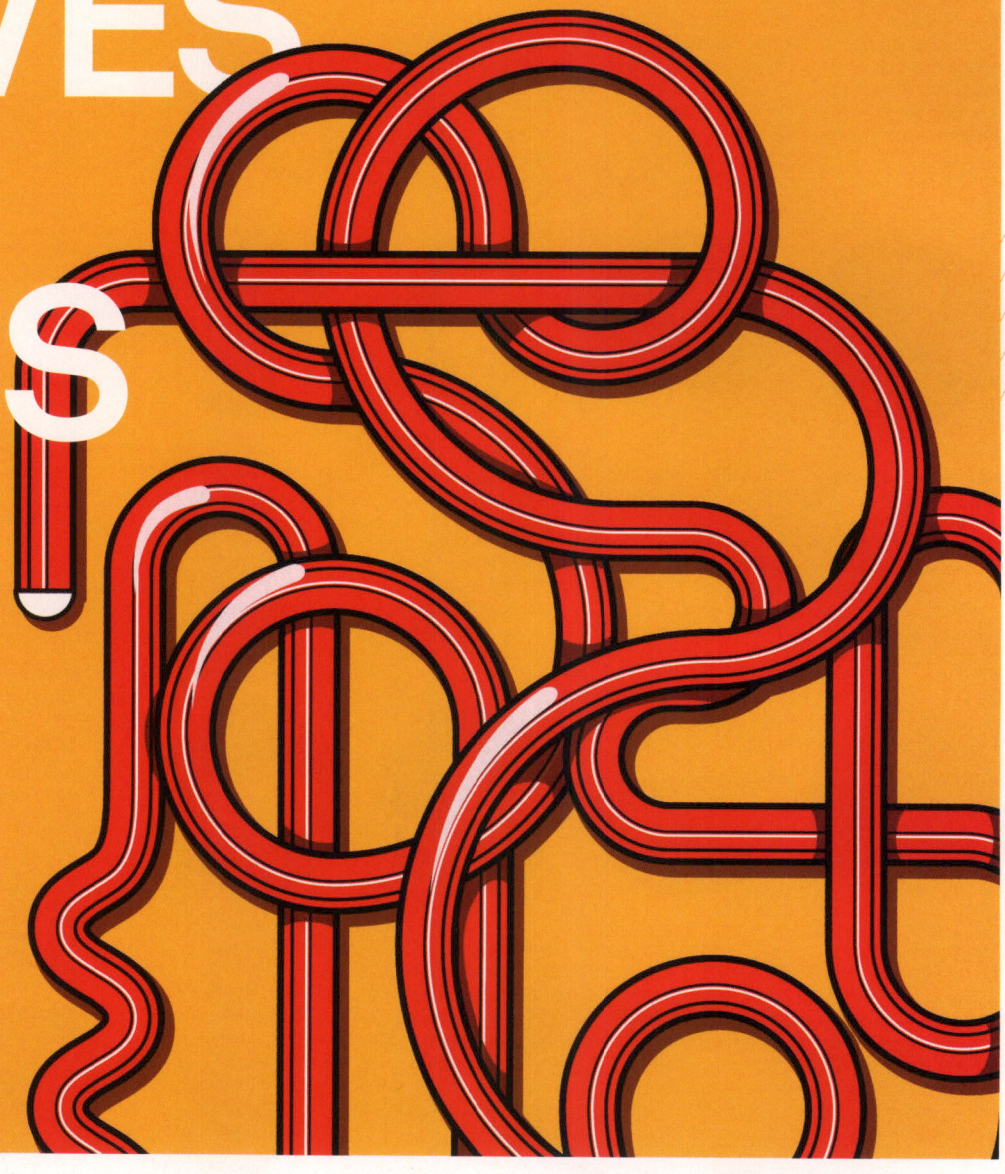
Everything you need to know to make Illustrator's features work harder for you

**THE PRO'S GUIDE TO CURVES AND PATHS**
**This page:** Brush up on your knowledge of paths and Bezier curves, and reap the benefits with a smoother, more efficent workflow

**THE PRO'S GUIDE TO SHAPE BUILDING**
**Page 14:** Unlock the full strength of two of Illustrator's most powerful tools, the Pathfinder and the Shape Builder, to work faster and smarter

# The pro's guide to BEZIER CURVES AND PATHS

Take tighter control of the basic building blocks of Illustrator to streamline your workflow and improve your linework



**THE PRO'S GUIDE TO SYMBOLS**
**Page 20:** Be a more efficient designer by getting the most from symbols and bespoke brushes in Illustrator

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**THE PRO'S GUIDE TO EFFECTS**
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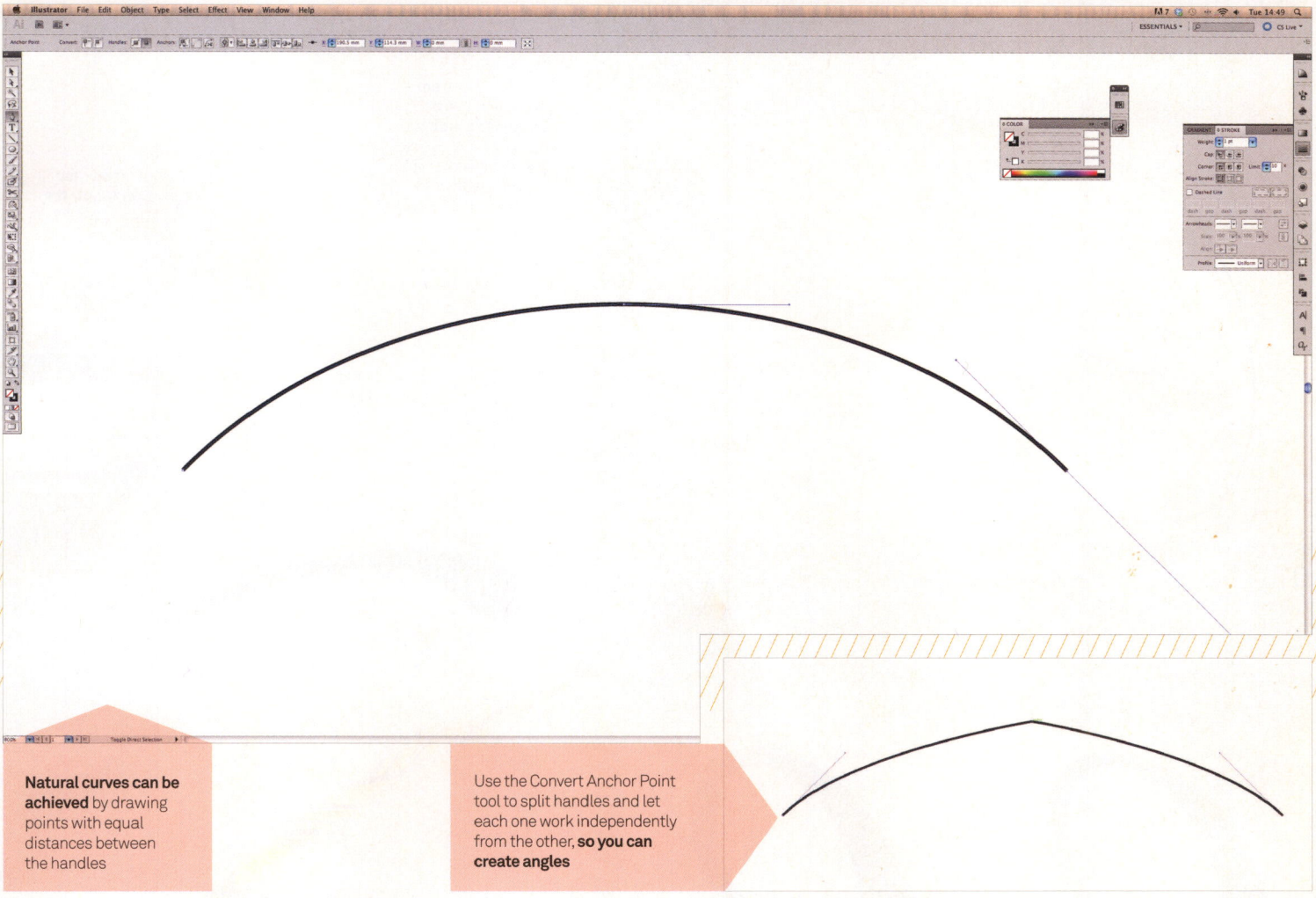


**Natural curves can be achieved** by drawing points with equal distances between the handles

Use the Convert Anchor Point tool to split handles and let each one work independently from the other, **so you can create angles**

**Illustrator has such a wealth of features in its arsenal that it's easy to pick and choose the tools that are suited to your needs without ever knowing the others.** The exception to this way of thinking is paths: without them you might as well pack up and forget about it. Whether open-ended or joined, every line you draw connecting two points is a path, and every single shape in every image consists of paths.

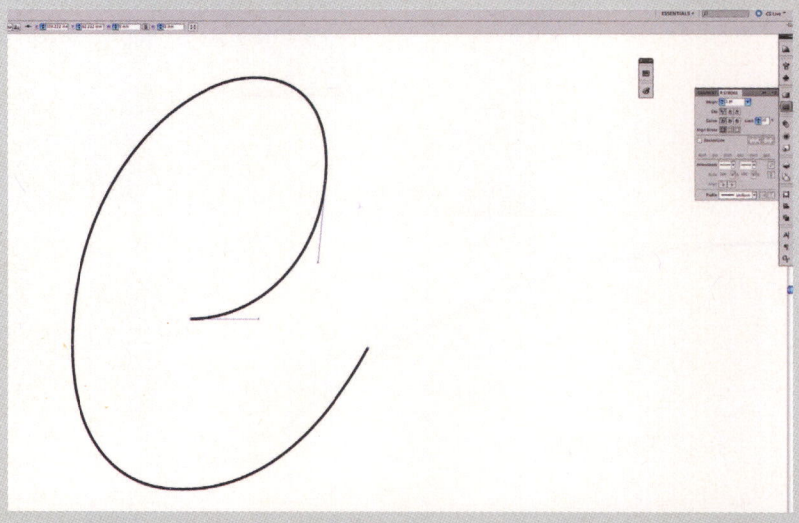
Essential to most complicated path shapes are Bezier curves. Popularised by French mathematician and engineer Pierre Bezier in the late 1950s and early 60s, a Bezier curve is essentially a mathematical formula that calculates the path a curve takes from point A to point B. It can be used to draw an infinite number of different shapes, and Illustrator's Pen tool takes full advantage of this system. The benefits over using raster images include infinite scalability and vastly reduced file sizes, making Bezier curves a popular choice – especially among those looking for a slick, smooth finish to their work.

While the actual process of drawing curves and paths is very simple, it can take practice to master – but we can use some basic principles to help us draw better and smoother shapes. Firstly, if you're going to be spending a lot of time with the Pen tool, get into the habit of using your keyboard as an aid to speed up your workflow. For example, when you're just about to start drawing, choose the Direct Selection tool (A) before selecting the Pen tool: you can then switch quickly between the two by holding Ctrl/Cmd, making handle-editing a much simpler and faster process. Another keyboard tip is to hold the Spacebar and click-and-hold the mouse when you create an anchor point: this enables you to freely move that point around, making sure you get your positioning just right first time.

Getting to know your way around the keyboard allows for a much more streamlined workflow. It's a good idea to get into the habit of switching between the mouse and keyboard as you go, rather than drawing roughly and then having to fix the curves later. Use Shift when drawing a point to constrain the handles to 45-degree angles – this is especially useful in situations when your shapes need to be consistent, such as when you're drawing type. Holding Alt/Opt selects the Convert Anchor Point tool, →

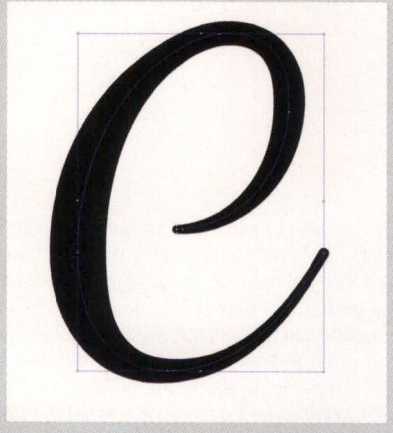
# Add character with the Width tool

## Control and alter the weight of a line at any point with this handy and easy-to-use tool

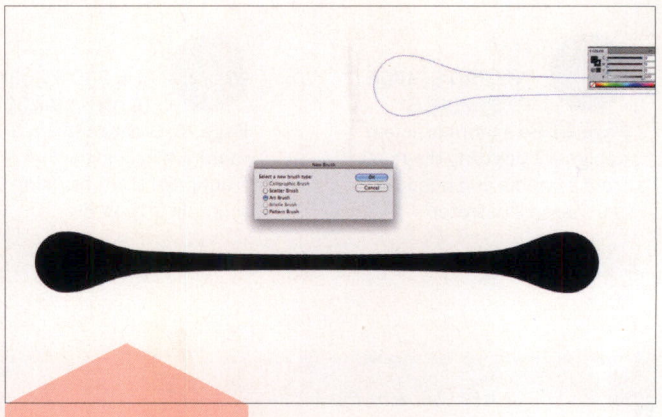


01 A good way to add character to a line is by using Illustrator's new Width tool. This enables you to alter the weight of a line at any point along its length with great control, and is great for drawing flourishes or casual scripts where significant variation in weight is desirable. To begin, draw your path in a single weight – in this case, a lowercase script 'e' glyph.

02 Click on the Width tool and click-and-drag on the line to alter its width at the appropriate parts. You don't need to stick to the anchor points that you drew originally, just alter the places where you feel the line needs work.

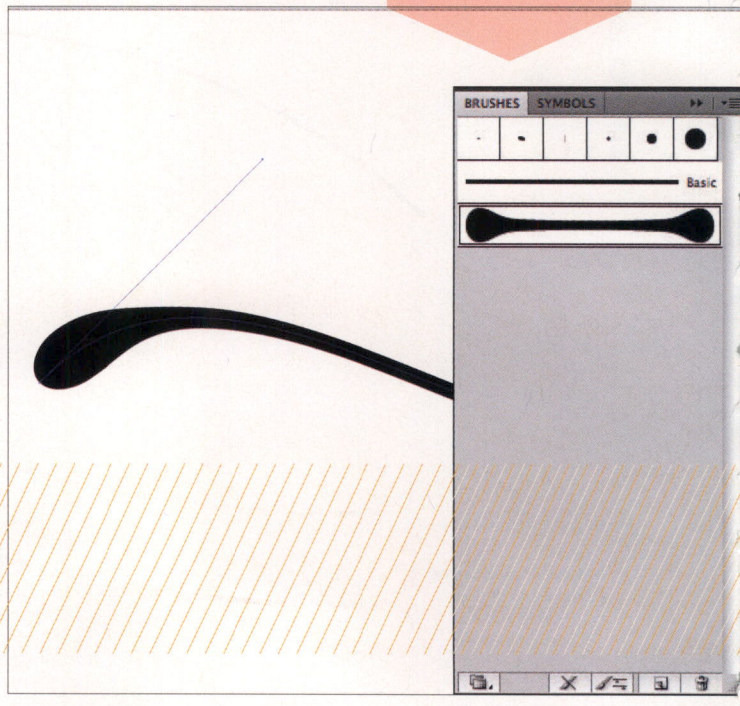


03 In the Stroke options, click to select a rounded cap so that your letter finishes with a natural, rounded edge, rather than a harsh cut. Then, once again use the Width tool to adjust the cap until you're happy.



To create **a custom brush that can be applied to a path**, just draw your desired shape then drag it onto the Brushes palette

You can c**reate your curves and apply the brush**, using a variety of options in the Brushes dialogue box




→ which enables you to instantly create a sharp angle or move two handles off at conflicting angles.

Additionally, you can use the Scissors tool (C) to cut the path at any point, as well as add and delete points at any time (the + and - keys respectively). Used properly, these shortcuts will improve your Bezier curves dramatically.

An often overlooked part of drawing with curves is the ability to apply brushes to a single weight line. In part, Adobe has made this process easier lately by including some basic profile shapes to the Stroke options, but you easily create your own to give you greater control over the look of a particular line. Let's say you want to draw a line with rounded ends that taper to a finer weight in the centre. Simply draw that shape first and drag it to your Brushes palette to create a new art brush. Now you can apply it to any line you draw, giving it an individual appearance.

The Blend Options dialogue is another useful feature for paths in Illustrator. Simply draw two paths, and Illustrator will connect them in stages depending on the parameters you supply. You can blend lines by a defined amount of steps, or by a specified

# Five pro tips

### 1/ Divide Objects Below

Use your paths as if they were a series of cutting lines by placing them on top of an object (a rectangle, for example). While the path is selected, go to Object>Path>Divide Objects Below. This is a simple way of creating 'cookie-cutter' shapes without using the Pathfinder palette.

### 2/ Snap to Point

Get into the habit of using Snap to Point (which can be found under the View menu). This enables the perfect positioning of your anchor points. You can then Shift+click to drag points onto others with precision – and if you need to merge these shapes, you'll have a much cleaner outcome with less extraneous points.

### 3/ Simplify paths

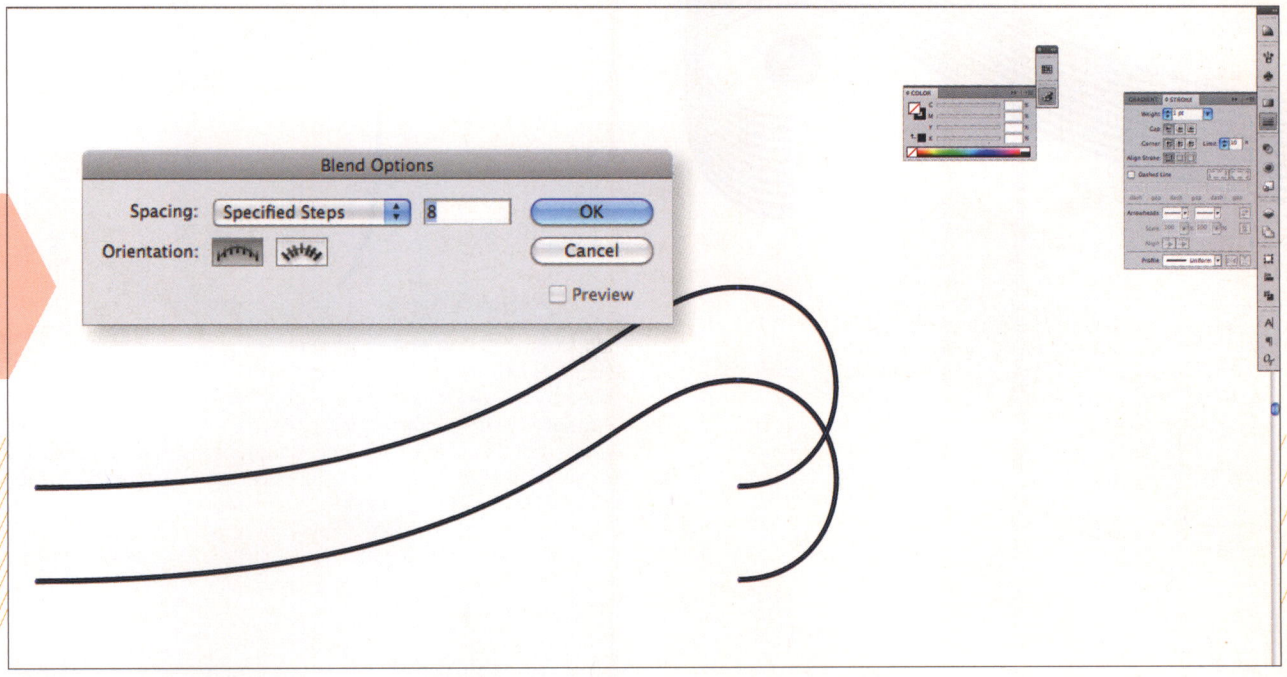
Sometimes you want a naturally erratic line: using the Simplify tool can really help you out. Draw a rough path and go to Object>Path>Simplify to enter a tolerance you can preview. This will naturally remove points and adjust the curves to create new variations on your original drawing.

### 4/ Connect paths

Connect two open endpoints by selecting both and pressing Ctrl/Cmd+J for a straight connection, or by pressing Ctrl/Cmd+Alt/Opt+J to average the distance of the endpoints vertically or horizontally. If the two endpoints are on top of one another, Ctrl/Cmd+Alt/Opt+Shift+J will connect them, but give you the option of a smooth or sharp-cornered join.

### 5/ Make a sunburst

You can make a quick and simple sunburst by drawing a circular path, giving it a dashed stroke and increasing the stroke weight significantly. From here you can expand the stroke and colour the rays independently for a super-quick flourish or background design.




By drawing a curved line and duplicating it, you can blend the two together and **Illustrator will fill in the steps for you**

distance between each blend element. You can also blend colour, as well as different stroke thicknesses. Let's say you've created a logo that uses a blended wavy line as part of the identity, and you require that same mark at varying sizes for print and digital. You can easily edit the thickness and amount of steps in the blend to enhance clarity at smaller sizes without changing the essence of the identity. In addition, this technique is also great for creating shading effects in illustration projects, both as a stylistic element and for work that will have print restrictions – a screenprint project, for example – as it enables you to imply depth without using any tints of colour.

When drawing curves, practice makes perfect. However, there are a few tips to bear in mind that will set you on the right road. As a rule, make sure you use as few anchor points as possible. There is a different school of thought that works on the principle that more points allows for more control – and to an extent this is true – however, more points also increase the chance of rogue kinks appearing in a curve and creating an amateurish or clumsy appearance to the overall look. The fewer points in a curve, the smoother its appearance: the trick is to know where to place each point to get the best result. To this end, get into the habit of clicking and dragging your first anchor point. This gives the first point a handle that you can take advantage of right away, rather than relying on the next anchor point to do all the work. Next, when drawing a series of anchor points try to make the distance of the handle from the path as close as possible to its preceding counterpart. This creates a harmony between the two points with no aggressive changes of direction, and will help achieve a more balanced, flowing look in the overall piece.

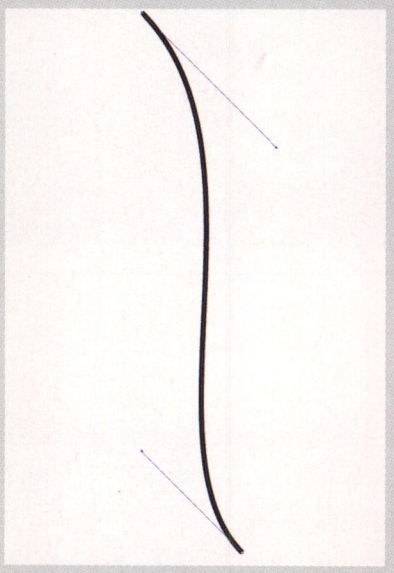
Another tip for clean curve-drawing is to use Shift on your keyboard extensively. By keeping your handles flowing across horizontal and vertical lines in the main (there will be natural exceptions), you can ensure that a consistent look flows through the whole piece. It's a bit like using a limited colour scheme to colour a piece – if you don't stray too far away from the basics you'll keep things uniform.

Don't be afraid to use the other drawing tools to help achieve your goal. The Ellipse tool (L) will draw a much better →

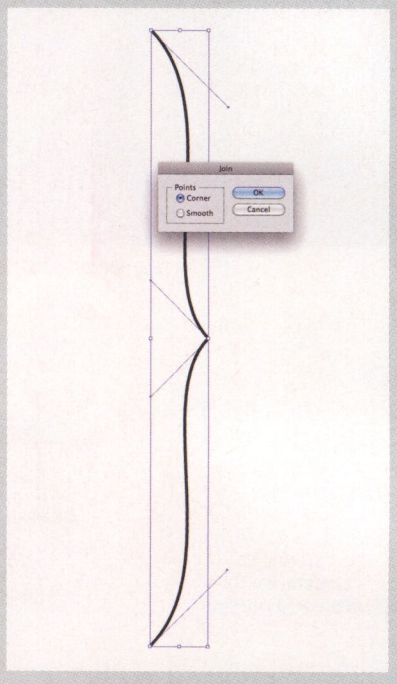
# Construct the perfect curve

Master the art of drawing beautifully smooth curves with ease – every time

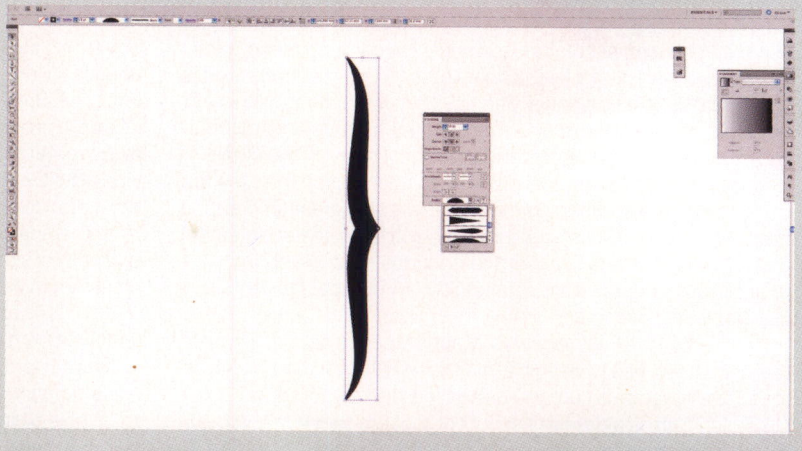
Using this expert technique, you can **optimise logos or images** for different uses and screen resolutions



**01** Knowing exactly where to position your points is key to good curve-drawing, so here are a few tips. Let's create our own custom brace (or curly bracket). Click-and-drag your first point to create a handle for better control, holding down Shift to constrain it to a 45-degree angle. Draw your next point below and slightly to the right, and once again hold Shift to constrain the angle of the handle.




**02** Next, you need to copy and paste your wave in place, then use the Reflect tool (O) to flip it vertically. Line up the points using Snap to Point, and then select the two overlapping points and hit Ctrl/Cmd+J to join them together into one path.



**03** To finish, increase the weight of the line and choose Width Profile 6 from the Profile options in the Stroke palette. You can use these same principles to construct much larger and more involved shapes, letters and logos.

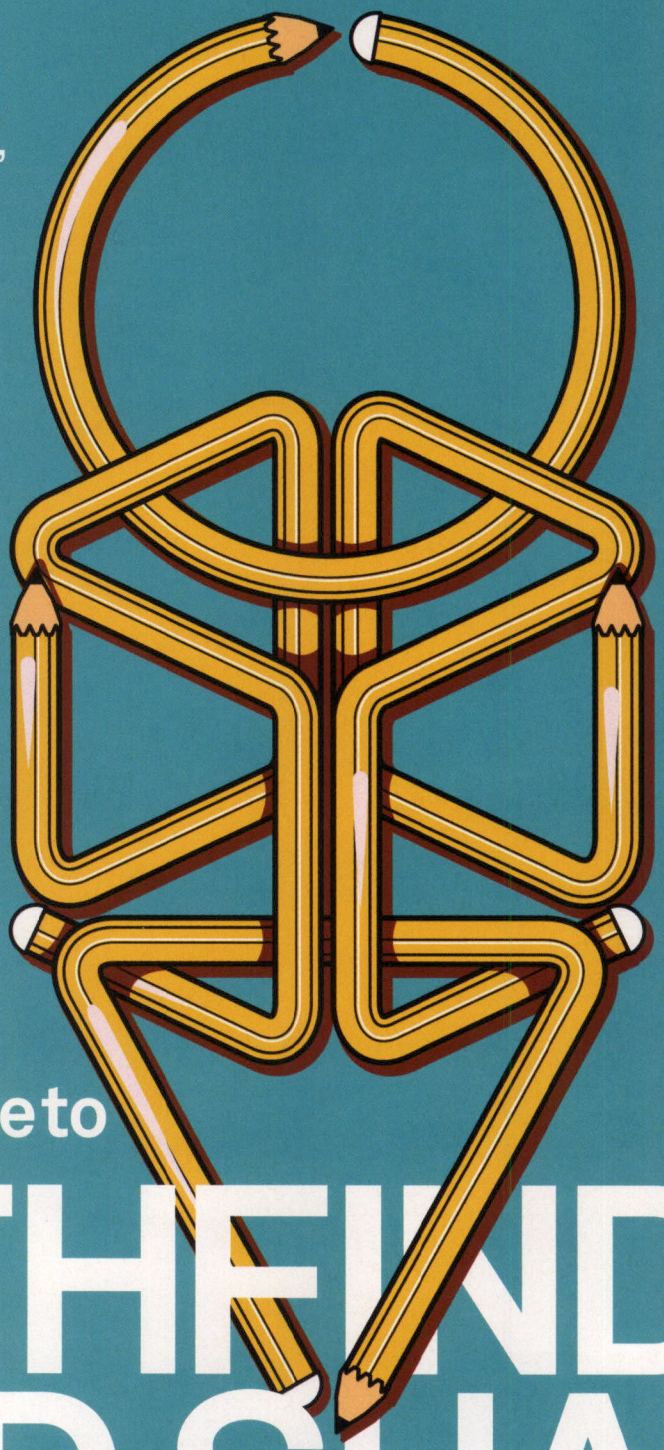
→ circle or oval than you can in no time at all, so if you need a perfect circle as part of your shape, use the right tool for the job, then cut the parts you don't need with the Scissors tool and join it to the rest of your path.

Lastly, when drawing new points where the line will change direction – for example, on a wave – add your points where the path changes direction, not midway on the curve itself, which creates subtle kinks. Clicking to add on the directional change produces a far more natural curve.

# Need to hone your skills?

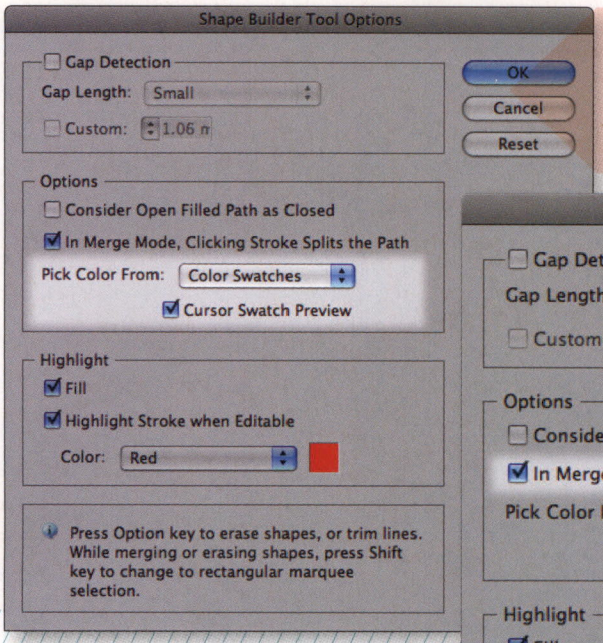
computer arts

Creating shapes is a key part of most Illustrator workflows, particularly for logo design and illustration. Here's how to get more from the powerful tools available

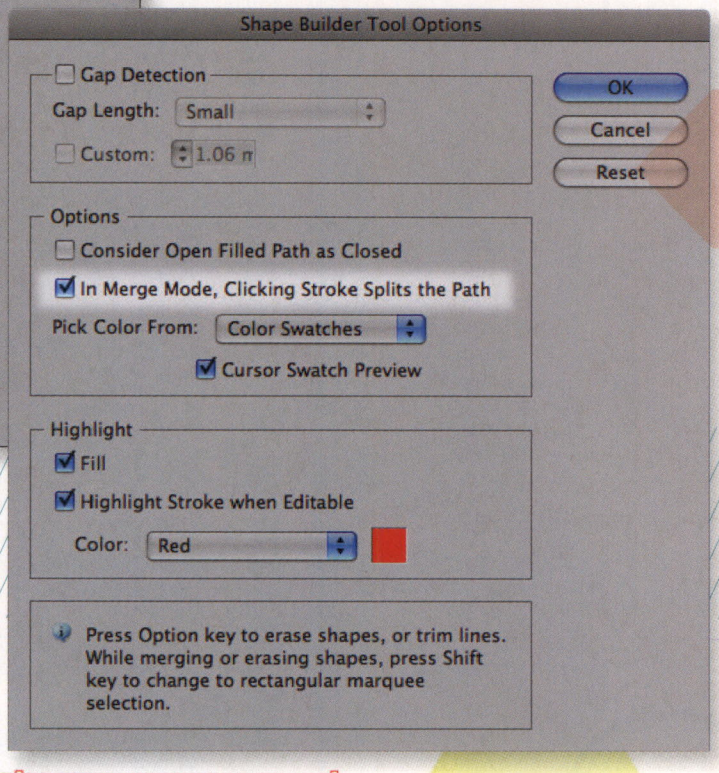


## The pro's guide to

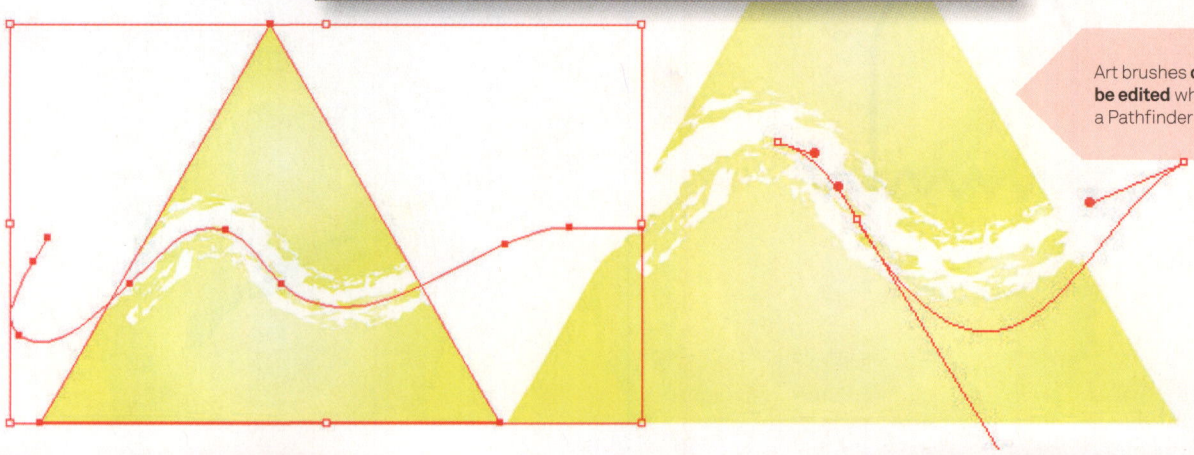
# PATHFINDER AND SHAPE BUILDING


Shape Builder Tool Options
Gap Detection
Gap Length: Small
Custom: 1.06 n
Options
Consider Open Filled Path as Closed
In Merge Mode, Clicking Stroke Splits the Path
Pick Color From: Color Swatches
Cursor Swatch Preview
Highlight
Fill
Highlight Stroke when Editable
Color: Red
Press Option key to erase shapes, or trim lines. While merging or erasing shapes, press Shift key to change to rectangular marquee selection.
OK
Cancel
Reset

You can predefine the colour of merged shapes with the **Color Swatches drop-down menu** under Options, when using the Shape Builder tool


Shape Builder Tool Options
Gap Detection
Gap Length: Small
Custom: 1.06 n
Options
Consider Open Filled Path as Closed
In Merge Mode, Clicking Stroke Splits the Path
Pick Color From: Color Swatches
Cursor Swatch Preview
Highlight
Fill
Highlight Stroke when Editable
Color: Red
Press Option key to erase shapes, or trim lines. While merging or erasing shapes, press Shift key to change to rectangular marquee selection.
OK
Cancel
Reset

'In Merge Mode, Clicking Stroke Splits the Path' ensures that you have **full control over not only a shape**, but also its path



Art brushes **can still be edited** while under a Pathfinder effect

**The Pathfinder panel is undeniably one of the most important and powerful aids in Illustrator, letting you combine objects into new shapes.** However, for many designers the Pathfinder panel has traditionally been the source of much confusion, providing myriad similar-looking buttons that represent different options. It's not uncommon for professional designers to get by working with just four or five of the 11 available options – often with little idea of what the rest are for.

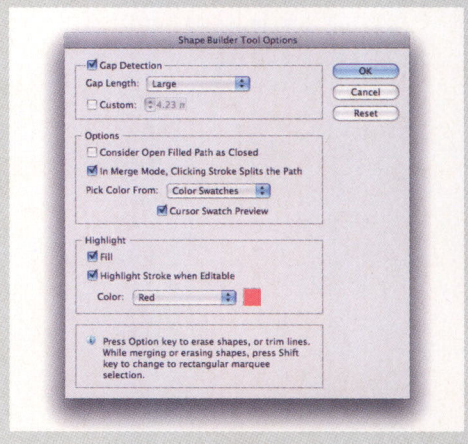
It appears that Adobe has tapped into the tangle that is the Pathfinder panel and addressed it in Illustrator CS5 by incorporating a new, quicker method of merging or subtracting shapes via the Shape Builder tool (Shift+M). Essentially, it's a powerful WYSIWYG (What You See Is What You Get) method of uniting, subtracting or intersecting shapes – the Live Paint of shape building, if you like.

The tool enables you to build shapes freely through an intuitive dragging method. The point at which you begin to drag is where Shape Builder defines the topmost object, regardless of whether it's in fact at the top. In the default setting, this also defines the colour of the final shape. The Shape Builder tool also offers the option to define the colour of the merged object, even if the desired colour isn't one of the shapes. With the object selected and the tool chosen, you can select your chosen colour from the Swatch palette and then apply the effect. This option is activated through double-clicking the Shape Builder icon and selecting 'Pick Color From Swatches' from the drop-down menu.

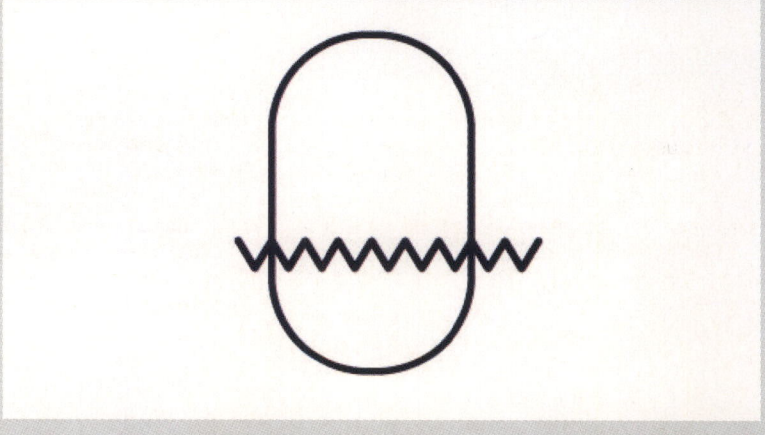
In addition, the handy dragging function enables you to define what kind of shape you'd like to build, depending on whether you drag to the intersection or to another overlapping shape. The Shape Builder tool is especially powerful when you're working with paths, because it allows for the removal or splitting of segments from paths. This feature can be further enhanced by checking 'In Merge Mode, Clicking Stroke Splits the Path' in the tool's Options panel. This is particularly good for the accurate dissection of paths without the need of a fill, and can come in handy when strokes need to be trimmed to fit a shape. →

# Using the Shape Builder tool

## Dissect and trim shapes to create the forms that you want

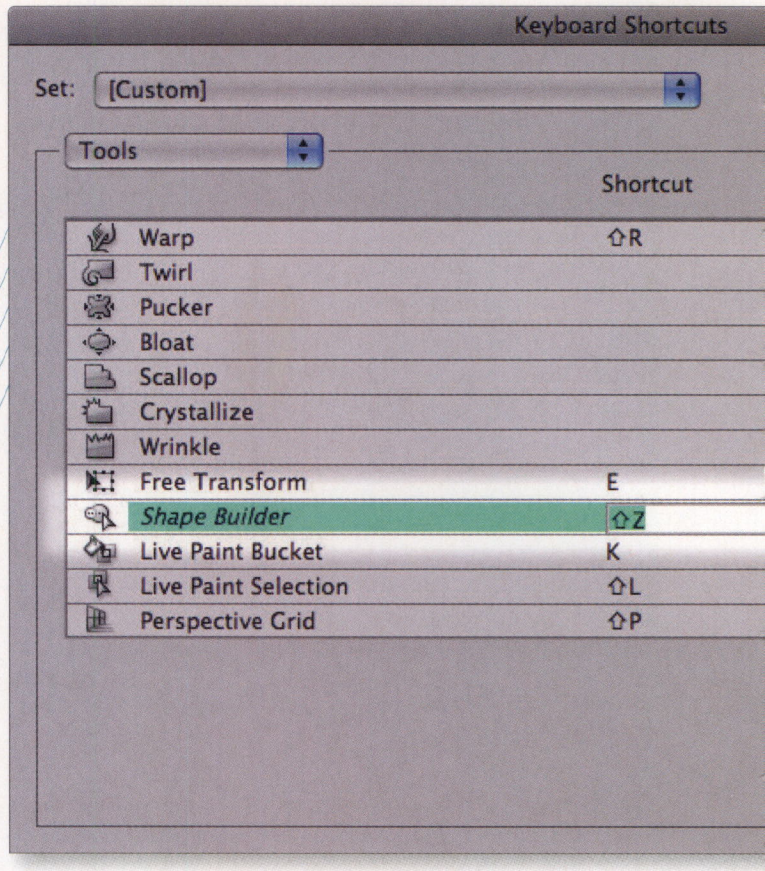

Shape Builder Tool Options
Gap Detection
Gap Length: Large
Custom: 4.23 in
OK
Cancel
Reset
Options
Consider Open Filled Path as Closed
In Merge Mode, Clicking Stroke Splits the Path
Pick Color From: Color Swatches
Cursor Swatch Preview
Highlight
Fill
Highlight Stroke when Editable
Color: Red
Press Option key to erase shapes, or trim lines. While merging or erasing shapes, press Shift key to change to rectangular marquee selection.

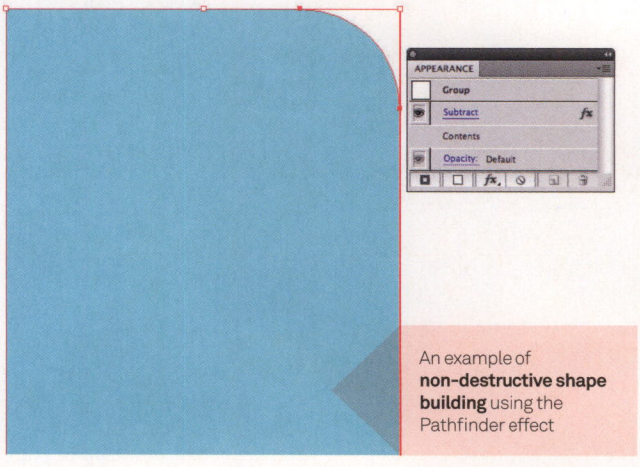
**01**____ First ensure that 'In Merge Mode, Clicking Stroke Splits the Path' is selected in the Shape Builder options. This is accessed by double-clicking the Shape Builder icon in the left menu, and means that you have full control over not only the shapes but also the paths involved, allowing for precise dissection and trimming, which is what we'll be doing here.



**02**____ Ensure that you've selected the relevant shapes before you use the Shape Builder tool. Here, I've chosen to create a simple ghoul using a rounded rectangle and zigzag path as a template. With the shape selected, hold the Alt/Opt key and left-click on the parts of the path you'd like to remove. The tool finds and breaks up paths, based on the points where they overlap. In this scenario, I'd like to remove the bottom part of the rounded rectangle, as well as the excess parts of the zigzag path.

**03**____ The final step is to create a shape from the two paths. To do this, direct select (A) the two bottom corner points of the ghoul. With these selected, you can either press Ctrl/Cmd+J or go to Object>Path>Join in the top main menu. Apply this function to both ends of the ghoul to close the paths and create the shape.



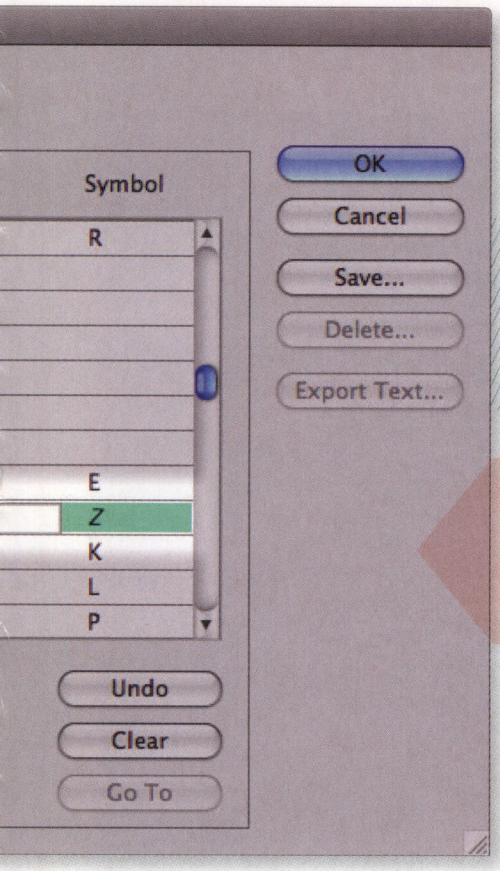

An example of **non-destructive shape building** using the Pathfinder effect

→ The Shape Builder tool is an excellent alternative to the occasionally cumbersome Pathfinder panel. It streamlines your workflow and merges shapes efficiently and intuitively. One effective way to benefit from this is to remember the shortcut for the tool, because some operations take the same number of clicks as the Pathfinder panel.

It might also help to adjust the shortcut for the tool if you're right-handed, otherwise your hand will need to leave the mouse to punch it in. Shift+Z, for example, is a good option that you can type with your left hand.

Using the Pathfinder effect (Effect>Pathfinder) – as opposed to the traditional panel – is a great, non-destructive way to customise a shape. It works in much the same way as the palette, but as an effect: this means that you can edit or remove the treatment and return your base shape to its original state.

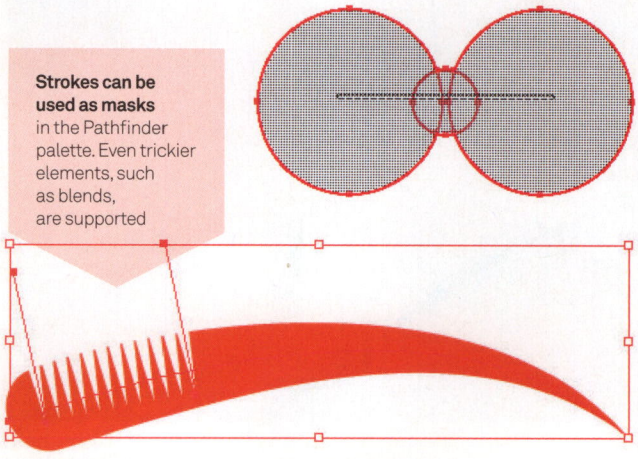
The Pathfinder palette offers an option that's similar, where you create a compound shape from several smaller shapes (this is done by holding Alt/Opt while clicking the desired effect,




**Changing the shortcut for the Shape Builder**, particularly if you're a right-hander, can be beneficial to your workflow and efficiency

The Shape Builder enables you to **merge, subtract or intersect** different overlapping shapes

**Strokes can be used as masks** in the Pathfinder palette. Even trickier elements, such as blends, are supported



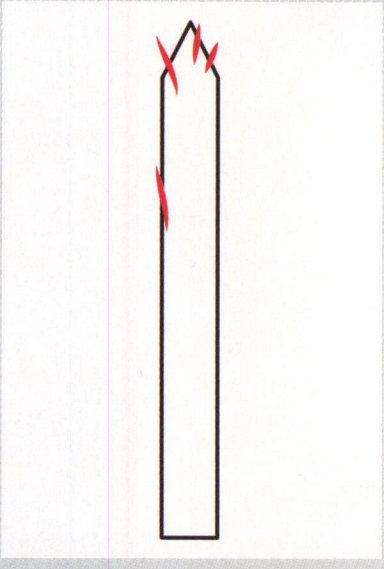
and the result is something reminiscent of a clipping mask), however, the main drawback of this method is that while the shape can be changed, its appearance and attributes can't. As a result, many professional designers prefer using the Pathfinder effect instead, because it offers much more freedom and the ability to fully customise a shape.

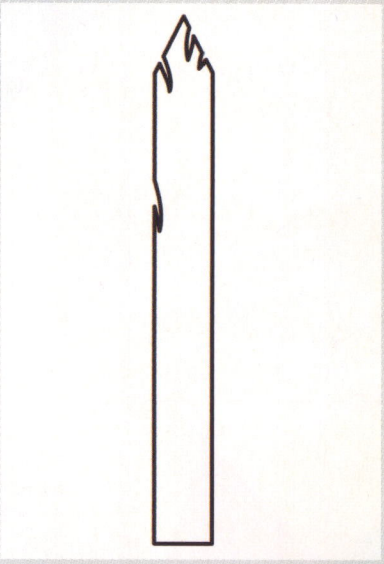
The Pathfinder effect also offers extra room for variations and control, and is much more manageable. The effect works when you group two or more objects together. Alternatively, there's the option to target an entire layer for the effect, but this depends on what kind of project you're working on – you might prefer to keep your design in groups.

In addition, because it's an effect you can add multiple treatments by creating many levels of groups. This functionality can be particularly helpful if you're creating custom fonts, or when there needs to be a number of variations of a particular shape. The effect enables you to adjust the shapes to create different versions using the same base. It can also be useful →

# Pathfinder effect: Subtract

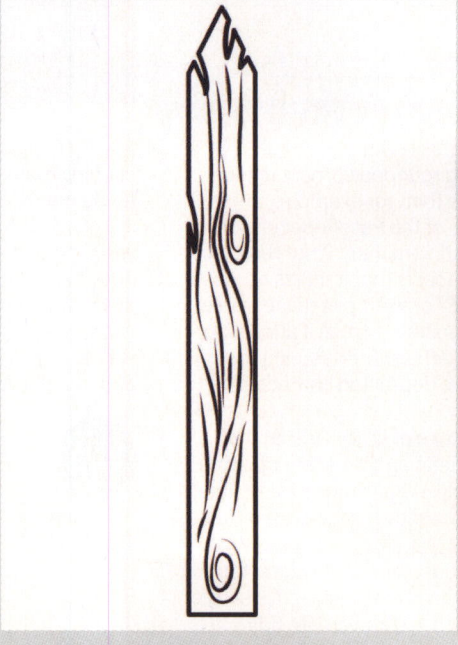
## A simple way to remove the parts of a shape that you don't need



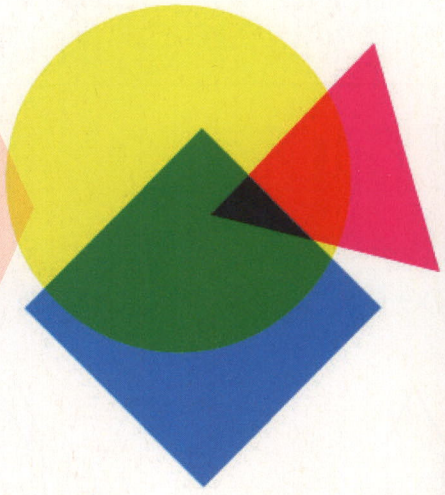


**01** An excellent method for removing the unwanted parts of a shape is to use the Subtract effect. To add some character to a plank of wood, for example, you might want to take some chips out of the basic shape. Simply use a custom brush (I've gone for a tapered one) and define the chunks that you'd like to take out.

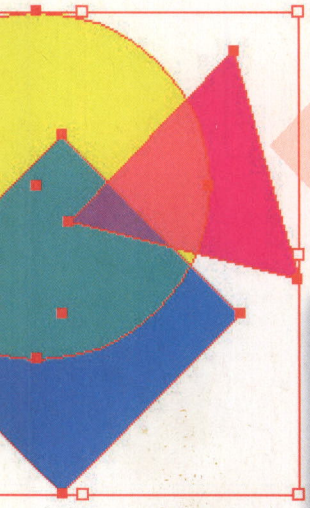
**02** The Pathfinder effect will only work on a grouped object or targeted layer, so group the object to make it easier to manage. Ensure that the bottom-most shape is the one that you'd like to add or subtract from. Once this is done, go to Effect>Pathfinder> Subtract. In your Appearance palette you'll now see a Subtract effect.



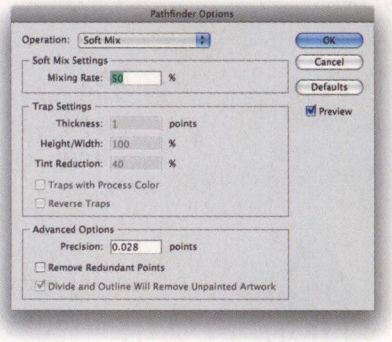
**03** Finish off the shape with some more textures. The removed chips make it look more weathered than the initial clean base. Furthermore, you still have the original shape intact, should you require more variations of the wood. The ease with which you can add, remove or adjust paths means that your work can be as detailed as you want, and still be manageable.



**Combine colours while maintaining accurate values** using the Hard Mix option in the Pathfinder palette, as here



**Intensity can be customised** with the Pathfinder effect's useful Soft Mix option




# Five pro tips

## 1/ Remove Redundant Points

When merging shapes, anchor points may overlap from time to time and, accordingly, you may stumble across points sitting on top of one another.

Subtracting these points manually with the Pen tool could significantly alter the overall shape, so a method for avoiding this is to check 'Remove Redundant Points'. This can be found by opening the Pathfinder options, which are located at the top-right of the Pathfinder palette. The same can be done for a Pathfinder effect by double-clicking the effect in the Appearance palette.

## 2/ Scissors and Join tools

Two valuable tools for building custom shapes are Scissors and Join. The Scissors tool cuts paths precisely, resulting in two end anchor points almost on top of one another. To fix the points back together, select both and press Ctrl/Cmd+J. When used with the Pathfinder panel, these tools are particularly good for building custom and unconventional shapes.

## 3/ Hard and Soft Mix

The Pathfinder effect offers the option to simulate an overprint-style result. A possible equivalent to this is the Multiply blending mode – the difference, however, is that while applying the Multiply blending mode makes an object transparent, Hard and Soft Mix do not – they're literally colour mixers. The Soft Mix option also enables you to control the intensity of the mix via a custom percentage.

## 4/ Shape Builder tool

The Shape Builder tool is a powerful WSIWYG alternative to the Pathfinder. While it's capable of a multitude of tasks, one of its best features is that it conducts complex actions within a small number of clicks. Memorising the shortcut will streamline your workflow, and you'll begin to wonder how you ever worked without it.

## 5/ Pathfinder clipping masks

While there's a dedicated method for creating a clipping mask, using the Pathfinder effect to mask out shapes is another great option. The masks are still fully editable, as is the content, which is in contrast to the Pathfinder palette. The Pathfinder effect supports content ranging from custom brushes to blends.

→ when you want to accurately add rounded corners to type without destroying the integrity of a font, for example.

One excellent application of the Pathfinder effect is to couple it with Illustrator's artistic brushes. What really sets the effect version aside from the panel is that it treats brushes as shapes, instead of simple paths. For example, the textures in the default chalk brush would translate across if applied to a shape when using the Pathfinder effect. This is a simple yet extremely effective way to add more depth and character to your design work using basic functions.

The most notable advantage of all this is that the stroke and path remain editable, meaning that anchor points and appearances are still adjustable. What's more, the effect even subtracts strokes from strokes, allowing for more intricate and complicated creations.

Through the above methods, the Pathfinder effect can be used not only as a powerful and non-destructive shape builder, but also as a means by which you can create tidy clipping masks for a variety of uses. The effect even goes as far as masking trickier objects, such as blends, for instance.

The Pathfinder and Shape Builder tools are highly versatile and lend themselves to a gamut of creative tasks. They demonstrate that in Illustrator there's always more than one way to do something – and there isn't necessarily a right or wrong way to do it. However, if you take the time to experiment with the different options, you'll soon find yourself working faster and more efficiently in Illustrator.

Or get inspired for that next big project?

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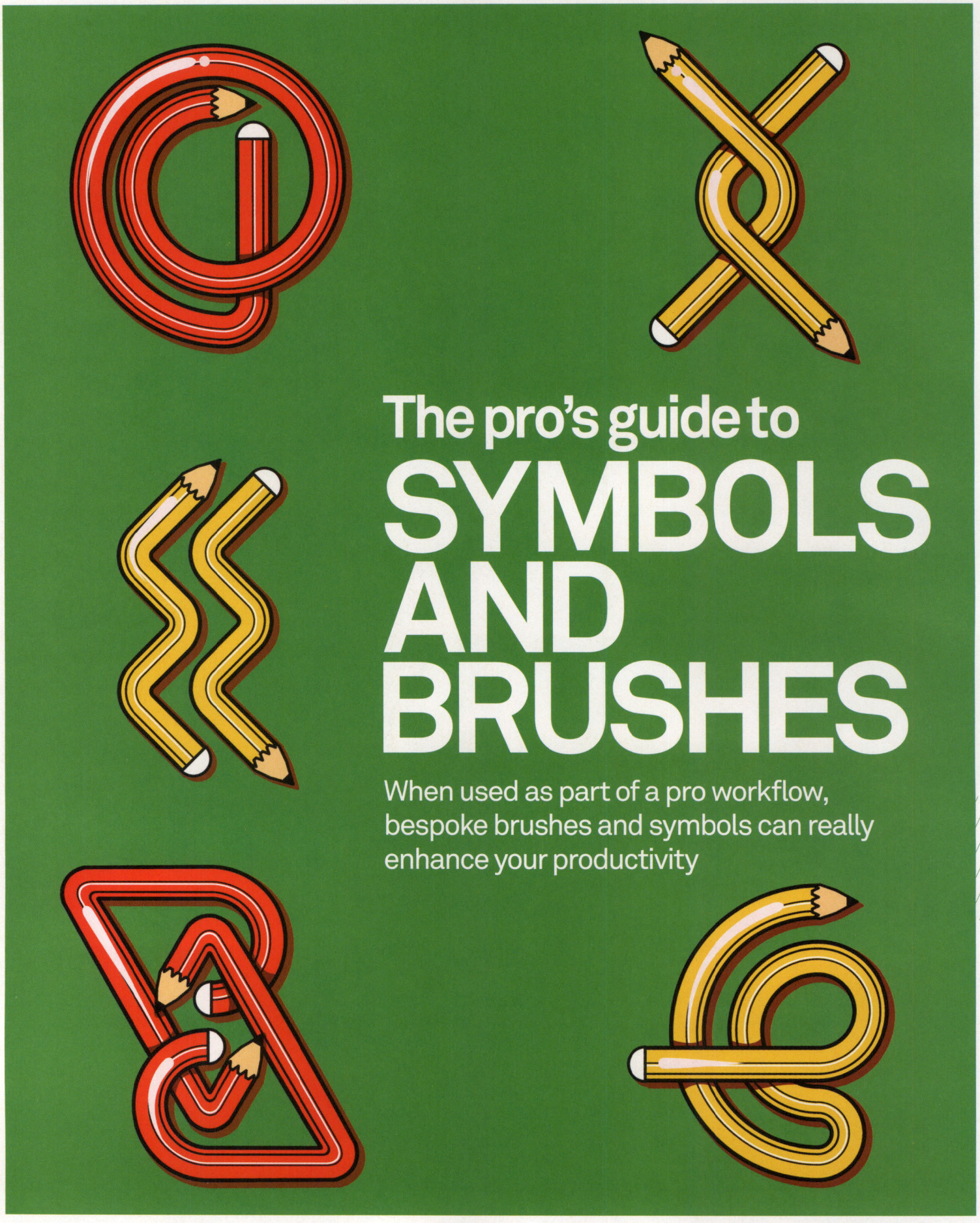
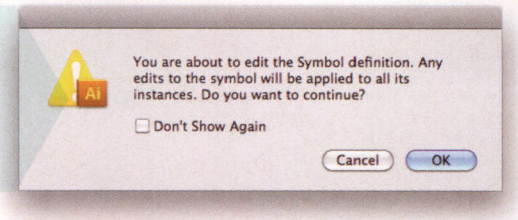


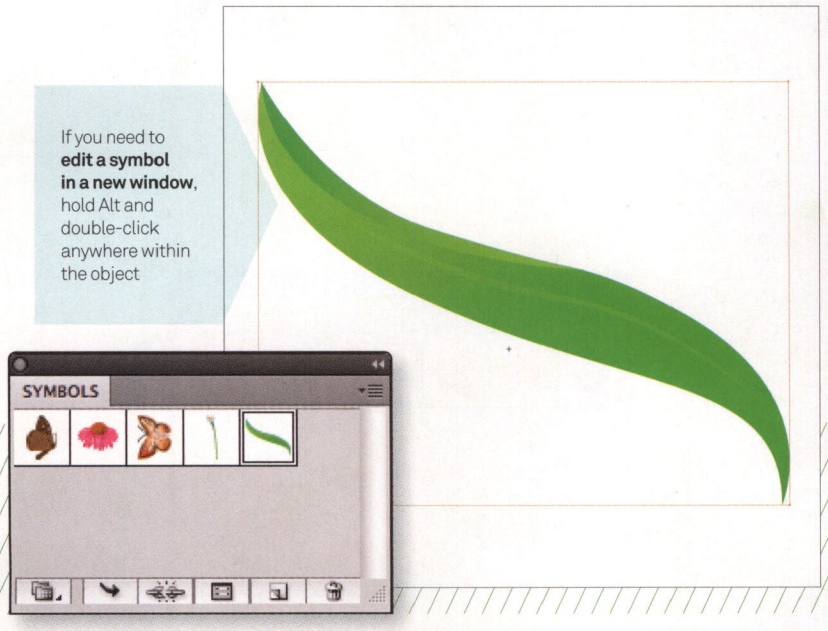
# The pro's guide to SYMBOLS AND BRUSHES

When used as part of a pro workflow, bespoke brushes and symbols can really enhance your productivity

Modifying the parent symbol will amend every instance of it, **saving a lot of time**


You are about to edit the Symbol definition. Any edits to the symbol will be applied to all its instances. Do you want to continue?
Don't Show Again
Cancel
OK

If you need to **edit a symbol in a new window**, hold Alt and double-click anywhere within the object




# Five pro tips

## 1/ Reset Symbols

You can unify all instances of each symbol with the Reset function. During artworking, you may scale certain parts spontaneously, which may result in incorrect values. To pull them back into the right size, select all instances and click Reset. They will all revert back to their default size, aligned accordingly from the registration point.

## 2/ Replace Symbols

When working with similar objects that differ only in colour or text within them, it's effective to replace symbols either one by one or all at once. Be sure to clearly label your symbols when you create them, as this makes it much easier to find them within the the Replace palette. Select the symbol to swap and then click Replace from the top second-level menu.

## 3/ Modify

If you need to modify your symbols, select and hold down Alt before you double-click on it. This saves time navigating pop-up menus. Your item will open in a new window, giving you isolated space to make changes. When you exit the window, all instances will be updated.

## 4/ Variable Scaling

Create variable symbols with 9-slice scaling. Some parts of elements can be expanded, leaving the rest in proportion. They can then be stretched vertically or horizontally whilst the other parts retain their original sizes. A fantastic feature for stems or flowers, where variable scaling will save valuable time and add to the fun aspect of illustration.

## 5/ Map Art

Symbols can also be used with 3D map art. Any of your created symbols can be applied as object textures, with the option to use different symbols for different faces of the object. Map Art is added via Bevel and Emboss, or even Revolve functionality. Even a simple symbol object can create intriguing results when it is applied to a shape – apply as many symbols as the object has sides for maximum effect.

**Now well into its twenties, it's safe to say that Illustrator has passed its adolescence and is now a fully mature product.** The application is packed with tons of useful and invaluable features that we have all used a million times, growing to love some more than others. Most designers have become so comfortable with the array of tools that they have started to take them for granted. Every new edition of Illustrator, though, brings a number of overdue technical tweaks and a handful of new features. Some of the fundamental features were introduced a long time ago and have provided solid ground to build on. Over the next few pages, we'll take an in-depth look at how to get the most out of two key tools: Symbols and Brushes.

When repeating tasks on a daily basis, symbols can make trusty companions for more efficient workflow, especially when the headache of grouping, scaling and modifying complicated objects becomes too much. Symbols are very similar to Libraries in InDesign and will help keep the items you use regularly in one handy place.

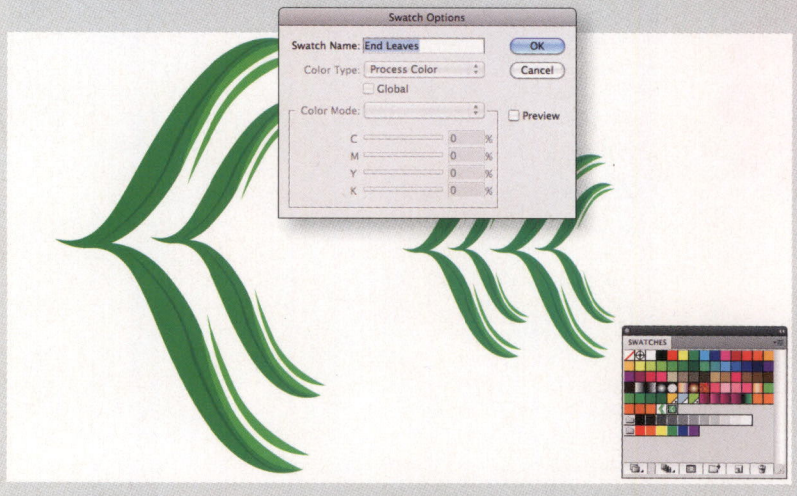
The majority of Illustrator's factory presets do not seem to be very appetising as they often look a bit dated. Not many designers would settle for the generic rocket ship or randomly coloured Rubik's cube. Despite this, the Symbols feature is indispensable for creating vector artwork, and the fun begins when you start to set up your own presets.

Creating a new symbol is straightforward. Highlight an object or group of paths and do one of the following: click the New Symbol button on the Symbols panel menu, drag the object onto the panel, or simply click F8 on your keyboard. Remember to name your symbols so they are easy to find again later.

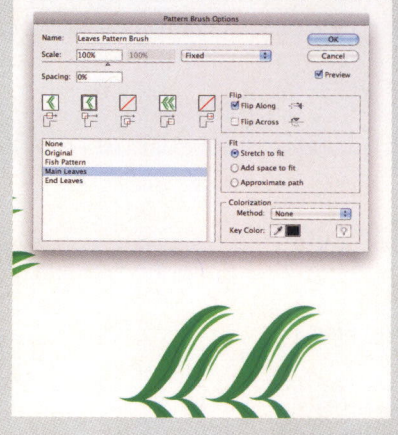
To modify your new symbol, hold down the Alt key and double-click the symbol within the artwork. Alternatively, double-click the icon within the Symbols panel. The object will →

# The Pattern Brush explained

Master this complex yet rewarding tool and stop wasting time slaving over repeated elements in your work




01 At first sight the Pattern Brush seems a bit complicated, but the results are definitely worth the trouble. To make the components of your brush, you need to create particles for beginning, middle and end points. Once you have finished drawing, select and drag the components onto the Swatches panel, making sure you have named the elements. The Pattern Brush does not work with gradients or spot colours – only simple solid tones.




02 You can see our saved Main Leaves and End Leaves components within the options below. The Pattern Brush will give you the option to assign each component to start, finish, outer and inner corners. Click on the boxes, one by one, and add your selection. If you find your Pattern Brush starts going in the wrong direction, go back to the main window and use the Flip options to change course.

03 If you work with a drawing tablet, your results can be improved by applying extra pressure to the ends of your stroke. This will result in interesting pattern interactions and distortions in your artwork, which will give it a more natural look instead of the pattern looking solid and uniform throughout the stroke. As with normal strokes, you can adjust the width by changing the point width from the Stroke panel.

Symbols can handle complex objects that **normally require extra rendering**

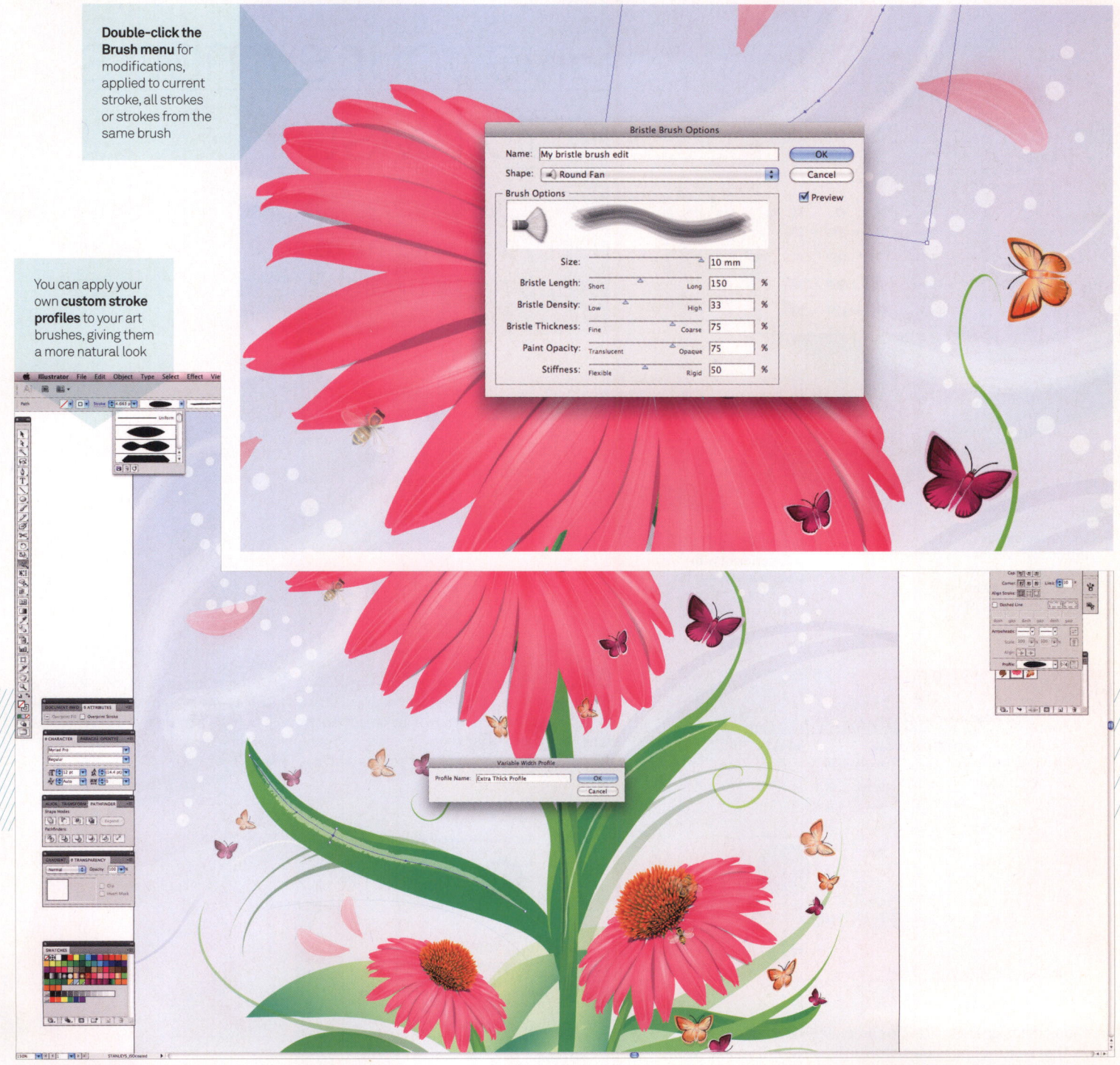
**9-slice scaling in action**: the stalk in the centre area will be the only part of the symbol affected by further scaling

→ open in a new window, away from the main illustration area. Even if you have scaled or rotated your object, the new window will open the symbol in its original size. When you have finished editing your symbol, save it and the changes will take effect on all instances. This is an excellent time saver when you use the same symbol multiple times in one project.

One of the most impressive new features, introduced in Illustrator CS5, is 9-slice scaling. Traditionally, the only way to scale a symbol was to hold down the Shift key and drag your selected object to the required size. Now, when you create a new symbol, you can tick the 9-slice scaling option from the pop-up dialogue box. When you modify the symbol, you'll find a set of four guides around the object, which you can edit individually. The name for 9-slice scaling comes from the fact that this tool divides each object into nine segments and any component that falls inside the guides can be resized. This is a great addition to

**Double-click the Brush menu** for modifications, applied to current stroke, all strokes or strokes from the same brush

You can apply your own **custom stroke profiles** to your art brushes, giving them a more natural look




Illustrator's features but it only works in one direction – either horizontally or vertically – at a time.

When working with symbols, there's also an option for object registration. When making a new symbol, the pop-up menu box offers the chance to set its origin point from the 9-point proxy. This will set a default origin point from which the symbol can be rotated. Since the symbols are a great shortcut for repetitive tasks, object registration quickly becomes a very convenient means of handling them. When you reset or replace symbols within your artwork, each new element will slot into its default position around the origin point. To do this, select your symbol within the artwork, and then select a new object to swap from the Reset drop-down menu. This will bring the symbol back to its original size.

Brushes are another element of Illustrator that often gets overlooked. They are another fantastic feature but, like Symbols, preset patterned borders can seem a little outdated. The Brush presets can seem confusing at first but once you get a look under the bonnet and start making your own, you'll soon start to appreciate this stellar feature.

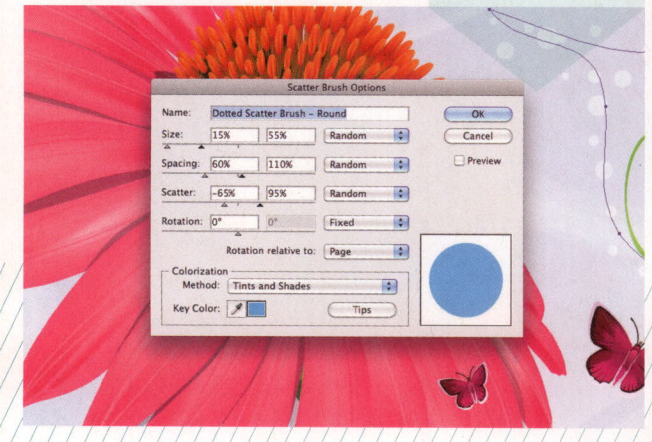
The latest version of Illustrator includes an overhauled Art Brush, giving you additional options to stretch parts of the brush. Before this software tweak, artwork used to get distorted and could give some odd-looking results. There's also a new tool called Stretch Between Guides – you can place guides around an object, or part of an object, and stretch it. This is particularly useful when drawing flowers, trees or anything else with long stalks. Unfortunately, neither of these options work with complex paths or objects with gradient colours. They work best with simple patterns and distorted grunge-style strokes.

The Bristle Brush is great for creating transparent Photoshop-like layers. The addition of this brush stroke has →

Colorization Tips
The colors your brush paints with depend on three things:
OK
1. The colorization method you choose.
2. The current stroke color, found in the Color Panel.
3. For the Hue Shift colorization method, the "key color" you select from the artwork with the Key Color Eyedropper.
Examples
Current stroke color:
None:
Tints:
Tints and Shades:
Hue Shift:

You can **adjust Art Brush Guides** to the part of the brush that will be stretched with longer brush strokes

**Experiment with various settings** for each brush: these can be used to add additional depth to your artwork

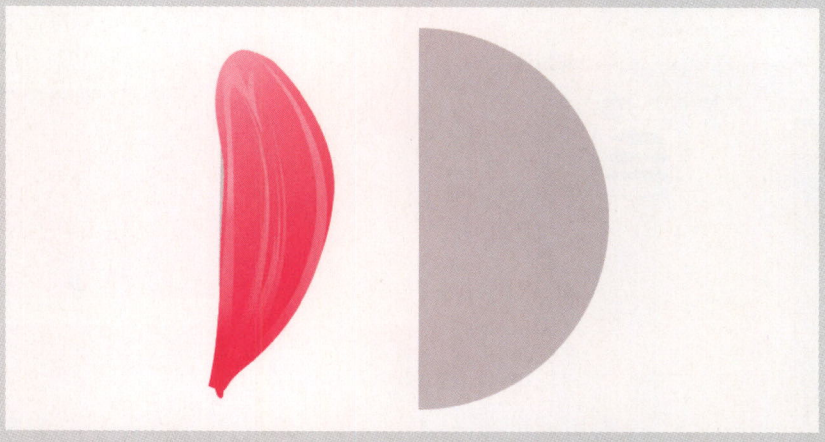



→ enabled designers to draw in completely new but natural ways, that were not possible before in Illustrator. If your artwork requires realistic breezy or dreamy textures, select the Bristle Brush library and choose a paintbrush type to suit your requirements. The brush will get automatically added to your current brush selection where you can modify the many options and make the opacity, thickness and density suit your artwork.

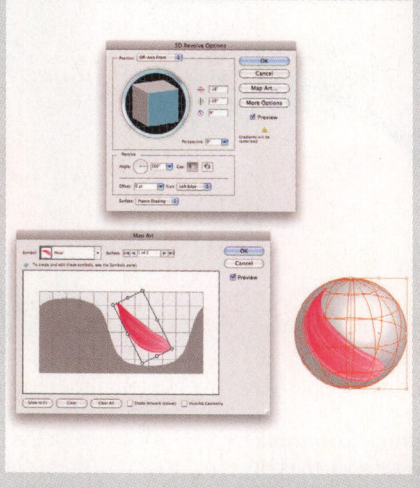
Finally, Variable Stroke Width (Shift+W) enables you to expand the expressive look of a brush stroke, while Art Brushes and Scatter Brushes can be tweaked in width to give them a more hand-drawn look and feel. There are countless options to achieve excellent results with these two features, to make sure you get the best possible impact from symbols and brushes.

# Give your symbols a 3D twist

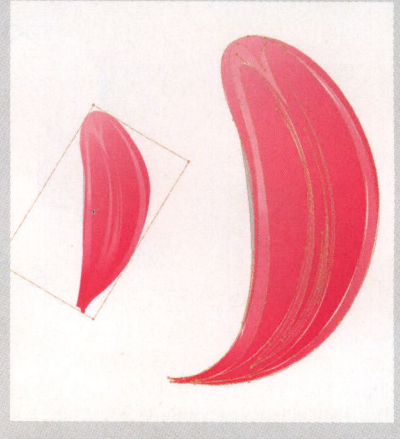
Save yourself time when adding depth and volume to your artwork by wrapping symbols around 3D objects



**01** The introduction of the basic 3D tools in Illustrator means you can apply symbols to multi-dimensional artwork as well as using the object to shape symbols in 3D. If you have created a new object but need it to have a more realistic, sculpted form, you can convert it to a symbol and wrap it around a supporting shape. For spherical objects, select half circles with the Revolve tool.



**02** Set your preferred options in the Revolve tool dialogue, and the half circle will become a 3D sphere. Go to the Map Art option to add the symbol of your choice, a petal in this example. The Map Art menu options enable you to move the symbol around the object path. Turn Preview on to see how it interacts with the 3D object – it's always worth devoting a bit of extra time when using this option as it can really affect the quality of the results.



**03** After you have found the right angle and position for the object, select No Shading from the Surface options. This will then remove the background colour from the sphere. Next, Expand the object and remove everything but the main object – in this instance, the petal – by using the Direct Selection tool. Once finished, you will be left with just the main object but in a more interesting shape, which will look much more in place floating in the overall artwork.

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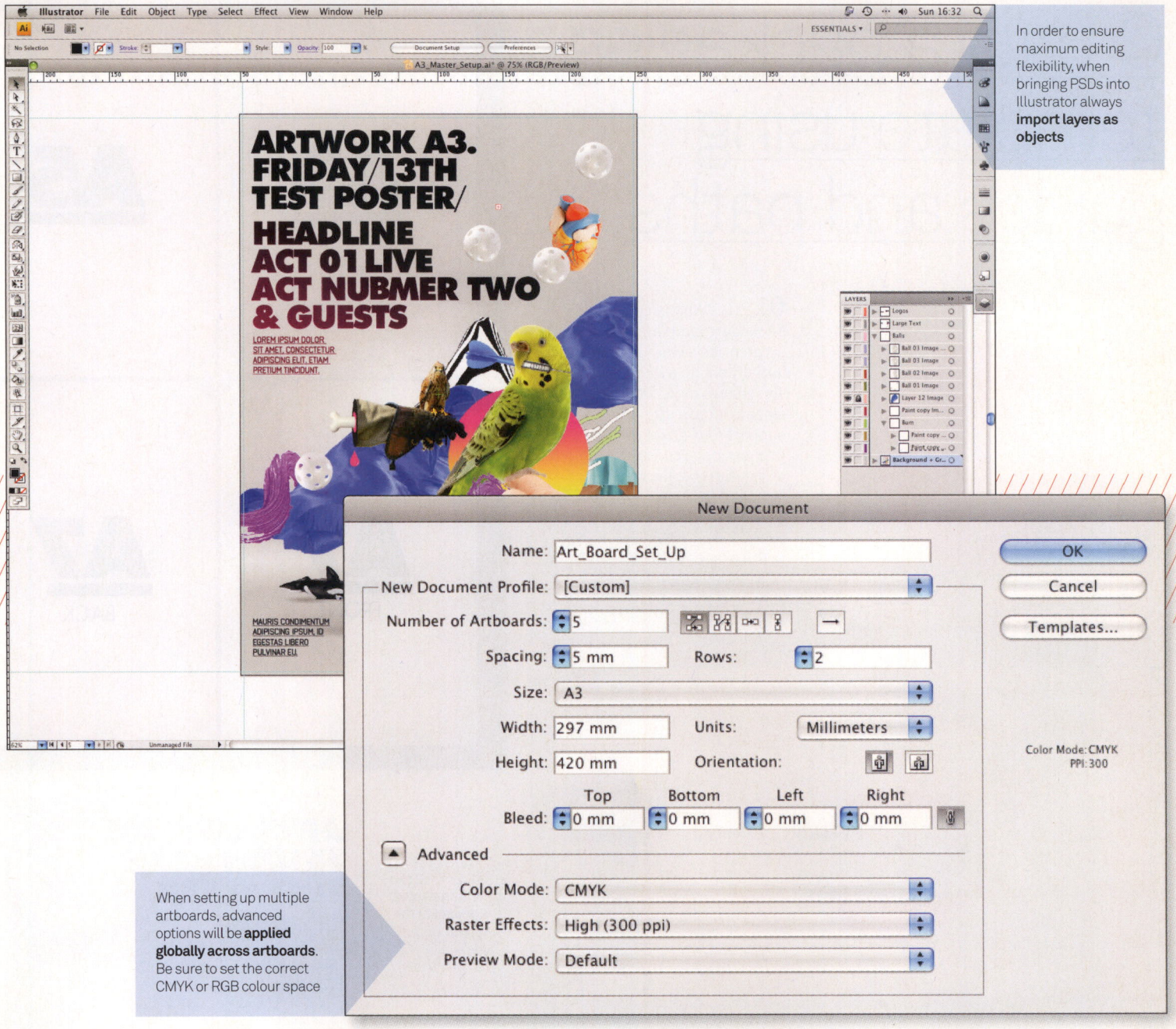
# The pro's guide to ARTBOARDS AND GRIDS

Master Illustrator's improved artboard capabilities and speed up your workflow on complex multi-part projects




In order to ensure maximum editing flexibility, when bringing PSDs into Illustrator always **import layers as objects**

When setting up multiple artboards, advanced options will be **applied globally across artboards**. Be sure to set the correct CMYK or RGB colour space

**The artboard has come a long way from simply being the region containing your printable artwork.** Developments in its functionality were first introduced in CS4, one of the most notable being the addition of multiple artboards for streamlining your workflow. You can now have up to 100 artboards of various sizes within a single Illustrator project.

Multiple artboards can can help quicken the workflow for projects that would have otherwise involved creating multiple documents or unorganised stacked layers. Some of the practical applications include multiple-page PDFs, printed pages with different sizes or different elements, such as a stationery set and separate elements for websites and video storyboards.

You'll be given the option to set up multiple artboards when you create a new project. In the dialogue box you can set the number of individual artboards you wish to have, the spacing between them, how many rows and also the flow. For example, a left-to-right flow would be most suitable for a storyboard, whereas a vertical scroll would be more suited to a book layout.

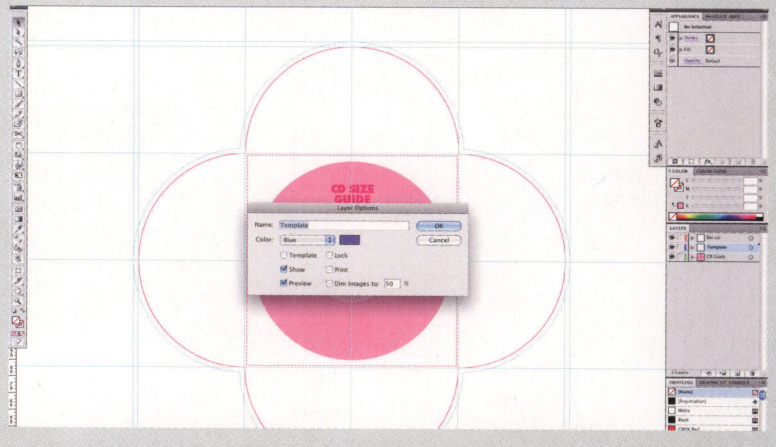
The initial width and height will be set universally across all of your artboards. In this one document, the size isn't fixed and individual artboards in your project can be scaled and resized on demand as you work.

Often when designing a campaign you'll find yourself having to recreate your artwork in various shapes and sizes for output upon a variety of media, and this is where multiple artboards can come in handy. For example, if you were creating a poster and flyer campaign at four different sizes, you could design it across four separate artboards.

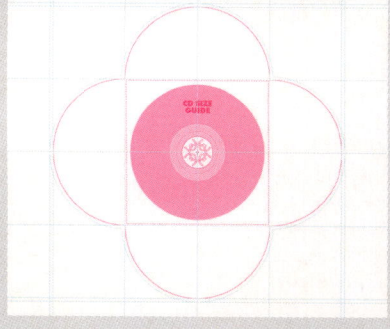
In this case, it would be a good idea to create the initial poster in Photoshop at A3 at the largest size first to avoid any unnecessary upscaling in your master objects as this will lead to pixelation and poor quality in the print reproduction. Once you have created your key poster design in photoshop, tidy and flatten the layers into the main design elements of your artwork and name each layer sequentially and correctly for clarity. →

# Create a packaging template using guides and paths

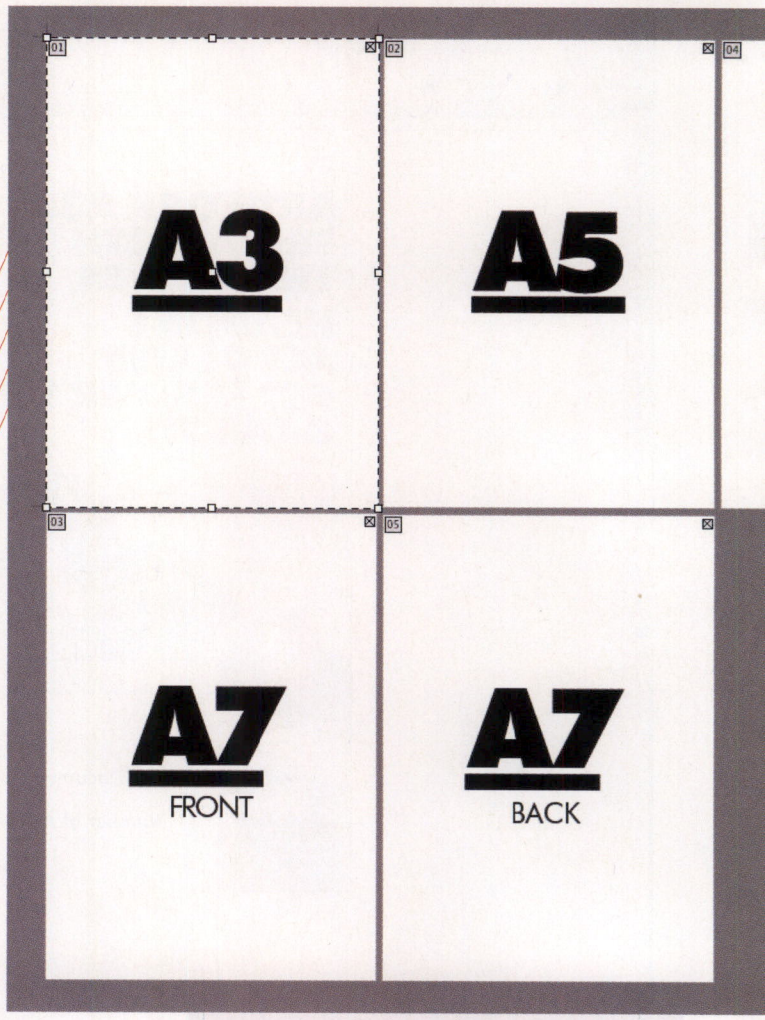
01 When designing packaging templates from scratch, it's always good to initially set up a large artboard. This allows more flexibility, since adding a structural support fold, gluing tabs or a fold-out page can easily double the size of the packaging template you're working on. Start your design by drawing your CD disc size in Illustrator to the exact measurements. Add guides around the CD, leaving a 3mm clearance area for the disc to sit within.




02 Using the guides you have created as an initial starting point, draw the packaging shape you require. The outer shape seen here will become the die-cut line. It's always advisable to print a mock-up at 100 per cent actual size to ensure everything fits correctly. To make millimetre perfect adjustments to your guides use the X + Y value fields at the top of the page, adding a +3 or -3 after the value in the box to move the guides back or along 3mm on the artboard. This is ideal for working out bleed and type safe areas.




03 Next add a 3mm bleed around the edge of the packaging by selecting the outer dieline. Copy it and paste it in place (Ctrl/Cmd+F). Select the line and go to Effect>Path>Offset Path. A dialogue box will appear. Set your offset within it to 3mm. This will provide you with a guide for your 3mm bleed area. Expand the appearance on this line, then right-click/Ctrl-click and select Make Guides.



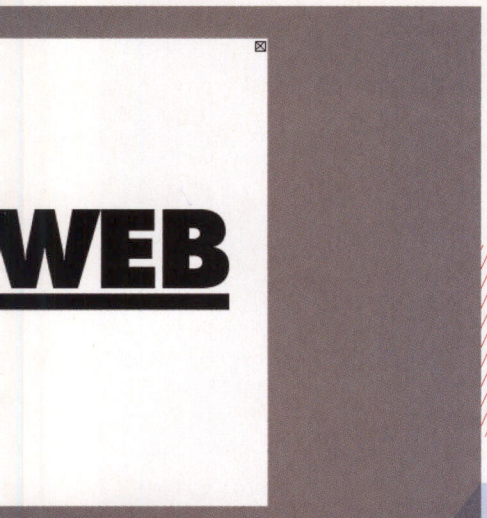

Use Cmd+0 to **fit the selected artboard to the screen**, useful if you're zooming out frequently

→ Then set up one artboard for each format needed. Manually resize each of them to the required size, including th e required bleed area. For example, an A5 148.5x210mm flyer artboard would become 154.5x216mm inclusive of bleed. The width and height data for each artboard can be edited in the W: and H: fields in the Artboard tool bar across the top of your screen (situated below the menu tabs). If you wanted to design a web banner format, set up the size correctly by switching to using pixels in the rulers.

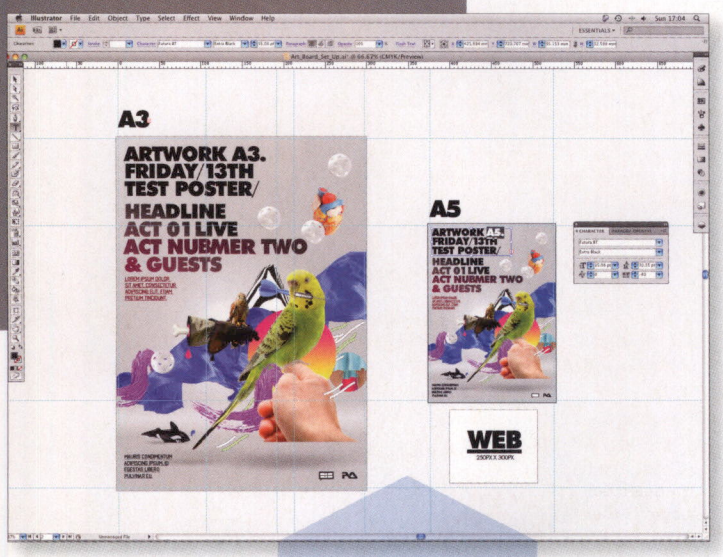
Once the artboards have been correctly formatted, add guides to denote where the bleed area is. Guides can also be added to denote text safe areas. These are required so that text isn't placed too close to the edge of the page during the duplication and scaling process. A larger text safe area must be left on the smaller sized print.

If you are using key Photoshop artwork then it should be imported into the first artboard. When importing the artwork check the 'Convert Layers to Objects' button on the Import

# Design a geometric display face using two-tier guides



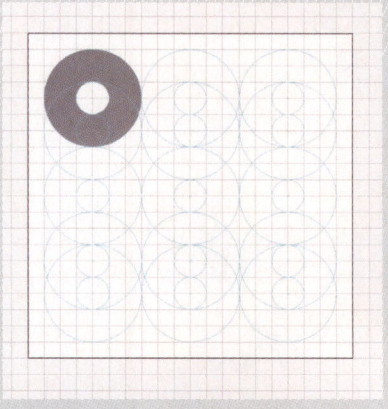

For design fluency each artboard within your document has the **same behaviours** as a standard single artboard

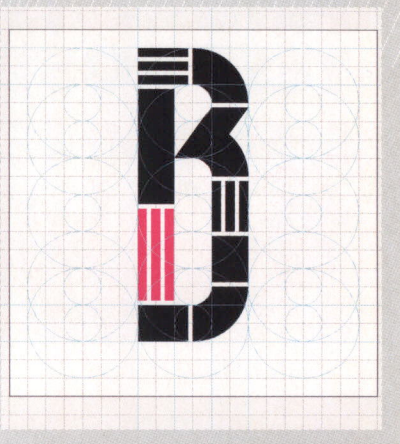



Some **useful shortcuts**: Shift+O enters Artboard mode, Option+arrow keys cycles through artboards, Esc exits Artboard mode

dialogue box. Once your Photoshop artwork is imported, Illustrator will recognise the layers as individual movable objects. Position the key art correctly on the initial artboard, select all the elements and group them. Next use the Artboard tool (Shift+O) to select the next artboard. The black line that appears around it will be bolder and more prominent. Paste your grouped key art into this new artboard and scale it accordingly. Move, scale and manually adjust the individual illustration objects on each artboard to best fit the size format you are working to. Small designs, such as those in A7 format, will have considerably fewer illustrative elements than the larger sizes. Check type point sizes when scaling poster artwork and be mindful of the font size on each particular format. Scaling a poster down from A3 may leave typographic elements or key details too small on A5.

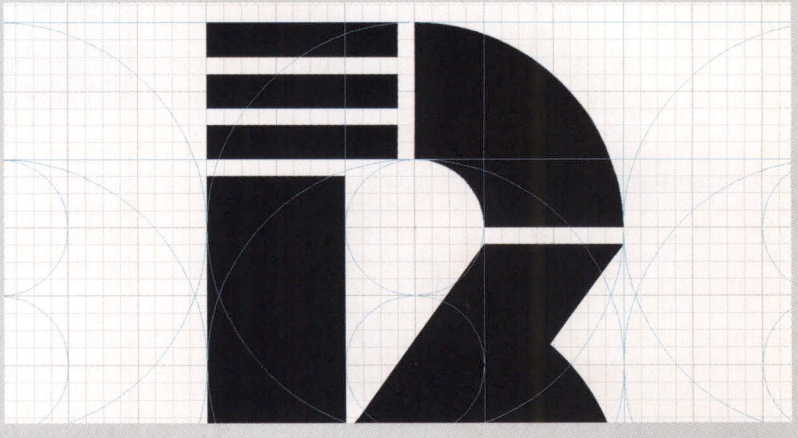
The Guides and Rulers feature functions globally across all of the artboards in the document when using the multiple artboard set-up. To view a unique set of width and height rulers for your selected artboard, go to View>Show →





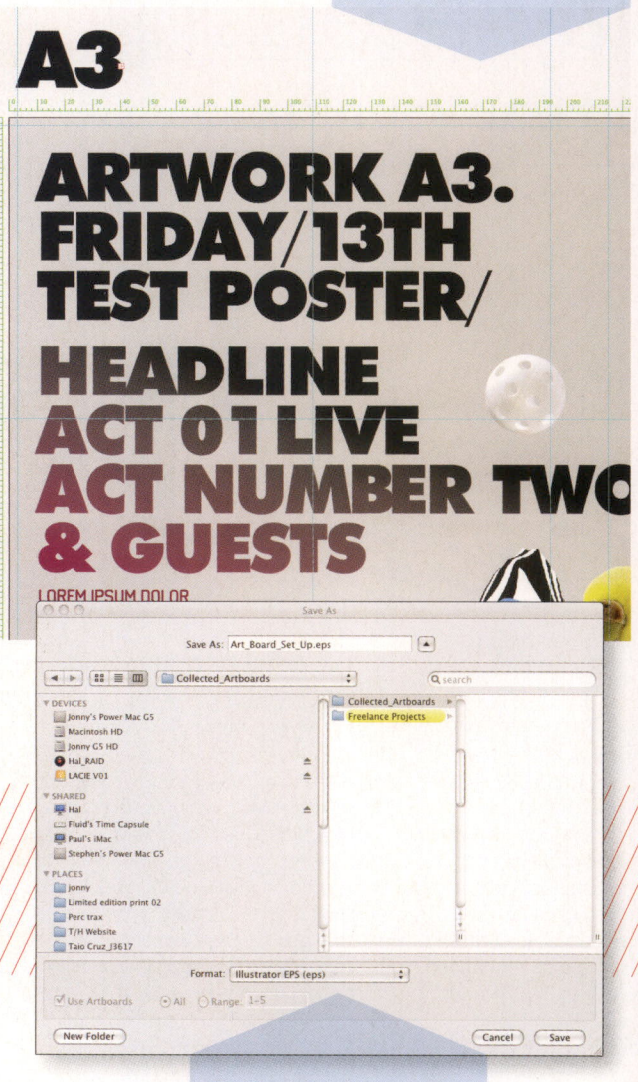
**01** Start by creating a new artboard measuring 200x200mm. Once your artboard is created go to Illustrator>Preferences>Guides and Grids. A dialogue box should appear. Set every grid line to 10mm and check the 'Grids in Back' box. For your document, rulers and grid lines should all be set in millimetres. Next add a new layer and show grids (Ctrl/Cmd+") Name the new layer 'Guides 01' and draw a circle on it with a hole punched out of the centre with the Pathfinder tool. Align the size of the inner and outer circles to the grid.

**02** Duplicate this circle across and down the canvas, all the time keeping it locked and aligned with the grid. These circles will form the basic underlying structure of your geometric display face. Once all the circles are positioned correctly, turn the objects into guides (View>Guides>Make Guides). These will now form the second grid in your two-tier grid/guide system. Hide and show this layer to turn these guides on and off. On a new layer use the relevant drawing tools to design glyphs for your new typeface.



**03** Turn on the Snap to Grid/Guides function while drawing the characters, as this will keep all your lines and points aligned correctly. Once the basic structure of your character is built, further detail can be added. Do this by breaking your main underlying grid up into even subdivisions. Use these as a guide when adding additional flourishes to your glyph. To add subdivisions click Illustrator>Preferences>Guides and Grids and add the number of divisions required in the Subdivisions field.

Show and hide artboard rulers with Opt+Cmd+R. It gives you **rulers specific to the artboard** that's currently selected




The **Range function** can be checked when exporting artboards to individual documents. This allows you to only export selected artboards

# Five pro tips

## 1/ Use objects as grids

When a small grid needs to be made within your current workspace, individual vector objects can be split into a grid section. Select your object, ideally a square or rectangle, and go to Select Object>Path>Split Into Grid. This will bring up a dialogue box, within which you can split your object up into a grid as you wish. You can also control rows and columns, as well as the spacing between them. The dialogue box features two parameter fields that control the overall width and height of the box – perfect for doing the maths when a grid needs to fit into a small space in a layout or illustration.

## 2/ Custom measurements

When working with complex print templates be sure to set your units of measurement to the same system as your artwork template. This helps make things easier and takes any guesswork or miscalculations out of doing unit conversions. You can set your preferred measurement unit by clicking Illustrator>Preferences>Unit and Display Performance. This dialogue box gives you the option to select your preferred system. You can also adjust this on the fly in your workflow by tapping Ctrl or clicking on the rulers on the top and sides of your artboard.

## 3/ Settings for fine detail

When working on an artwork or illustration where a large degree of precison is required, adjust your keyboard increments accordingly. These define how much objects move when nudged up, down, left or right with your cursor keys. Set keyboard increments by clicking Illustrator>Preferences>General. By setting your increments low at, say, 0.1 or 0.2, you can give yourself much better precision control when lining up artwork with templates and guides.

## 4/ Guide for guides

Setting up the correct guidelines lays the foundations for artworking detailed print and packaging templates and illustrations. Guides in Illustrator (unlike in Photoshop) act in a similar manner to objects, and can be selected, duplicated, copied and pasted, and can be selected individually or as a group – useful when duplicating artwork across multiple artboards and layers. Ctrl/Cmd+F pastes guides in the exact same location on a new artboard or layer.

## 5/ Larger artboards

When working on illustrations or logo designs a large artboard will help to speed up your workflow. A large artboard enables you to have multiple designs on the page at the same time and also leaves plenty of room on the sidelines for reference material, such as previous versions of the design, alternate font selections, additional illustration elements and so on. This method cuts out valuable time opening and closing documents to access files, speeding up the creative process.

→ Artboard Rulers. These rulers will apply to your selected artboard. To create guides on one specific artboard select it with the Artboard tool (Shift+O) and create the guide as normal. Making a guide while the artboard is selected ensures it will only span the width or height of that specific artboard.

Once you have created your multiple size formats and have settled on a final layout, it's then possible to export and save each artboard as a separate file. Files can be saved individually in EPS format. Saving separate files allows you to open each file individually, so you can send various single files to different clients and printers or drop your individual artworks into InDesign for further work or a more complex print output.

To save your multiple artboards out as individual EPS files, choose File>Save As and then name your file. Select Illustrator EPS from the drop-down format menu and check the Use Artboards box. This will give you the option of exporting all the artboards, or just a page range selection if you only require certain pages. Before saving make a new folder with the 'New Folder' button in the dialogue box. Saving your artwork here will keep all your separate artboard files together in one location. A separate Illustrator master file that includes all your artboards is also created when saving via this process.

When used effectively, multiple artboards, grids and guides can benefit your workflow efficiency and cohesiveness across different media. A little groundwork sets the foundations for a faster, more effective project, taking a lot of the rudimentary elements out and allowing more time for creativity.

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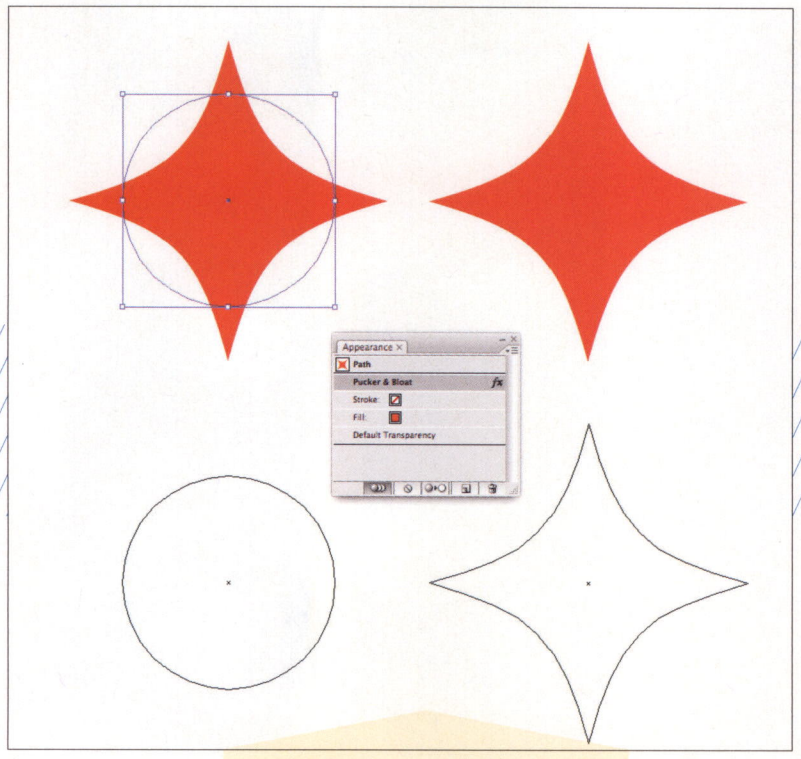
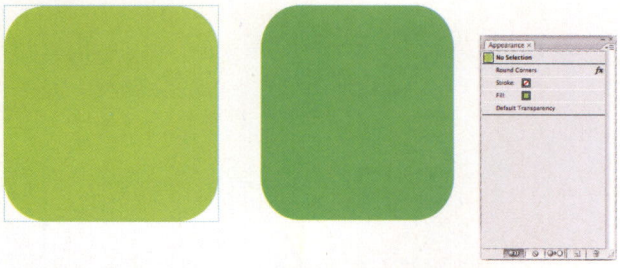
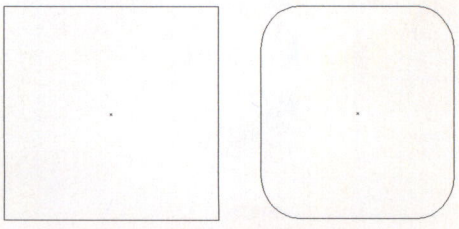
# The pro's guide to EFFECTS

By fully utilising the Effects menu you can free up time by adding depth and texture in a versatile, non-destructive way




The Effects menu enables you to **adjust the settings and appearance of each object independently**, whereas filters change the structure of the shape it is applied to



Effects and filters **appear identical** until you look at the Appearance palette or the Outline view

# Five pro tips

## 1/ Expand objects and effects

If you want to expand the appearance of an object that has an effect applied to it into a series of paths, go to Object>Expand Appearance. However, bear in mind that once the effect is expanded, it will no longer be editable. To ensure that objects and their effects then scale proportionally, open the Transform palette and check Scale Strokes & Effects and Transform Both in the fly-out menu.

## 2/ Live Trace

There might be times when you want to convert a texture effect, such as grain, into a series of paths. The easiest way to do this is to use the Live Trace option. First, expand your object, then apply Live Trace and expand it for a second time. The effect will be converted into a series of anchor points.

## 3/ Easy blur effects

How to create rosy cheeks: instead of using a white to pink radial gradient set to Multiply, try using the Gaussian Blur effect. You have much more control and can easily adjust the settings for the perfect blur. This is easier than dragging and tweaking using the Gradient tool, and is completely editable .

## 4/ Remove effects

Hitting the D key will remove all effects from any objects selected and return them to Illustrator's default – a white fill and black stroke. You can keep track of any effects that have been applied to an object within the Appearance palette.

## 5/ Transform effect

The Transform effect can be used efficiently when objects have to be rotated at a precise angle and repeated. Set the number of copies, your required angle and the horizontal and vertical units. This effect is great for more abstract work: experiment with the settings to see how it can be used to suit you.

**One of the most underrated and unused features of Illustrator is, without a doubt, its Effects menu.** Many designers, despite using the software every day, are unaware of how powerful a tool this feature can be. Even if you consider yourself proficient in Illustrator, over the following pages we'll walk through a selection of expert tips and tricks that will enable you to save time and work more efficiently, letting Illustrator do the hard work so you can concentrate on the overall vision of your designs instead of being forced to spend hours on the actual implementation. We shall be covering various techniques throughout this guide, ranging from how to apply effects to vector objects to change their appearance, to producing textures that are 100 per cent scalable and vector-based.

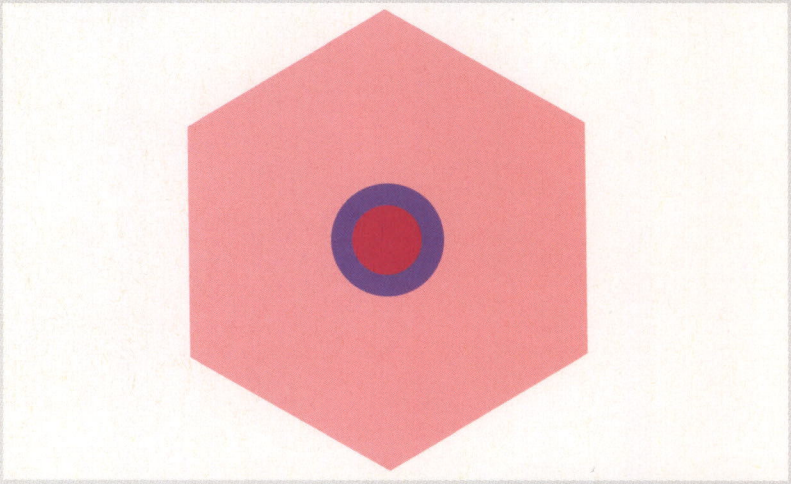
Even if you've been using Illustrator for many years, it's still possible to learn new things every day. The secret is to continue experimenting with its ever-increasing plethora of tools, finding new ways to speed up your daily workflow and increase your productivity and your output.

Firstly, why use the Effects menu? Why not use filters or use the Pen tool to draw the shape you need? Essentially, a filter will alter the underlying structure of the path or shape it is applied to, whereas the different effects only change the appearance of the shape. Effects can be edited and deleted, and multiple effects can be applied to a single shape. These can also be saved and loaded into a custom library in the Graphic Styles palette, which we will explore later.

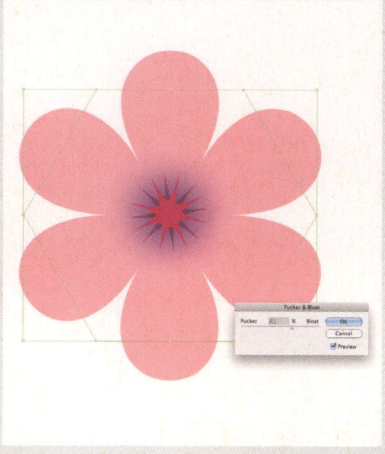
The filter changes the structure of the shape it is applied to, as you can see in the example at the top left. The Pucker & Bloat effect (Effect>Distort & Transform) has been applied to the ellipse shape on the left, and the Pucker & Bloat filter (Filter>Distort) to the one on the right. At first glance the two shapes may look identical. However, now look at the two →

# Graphic elements using effects

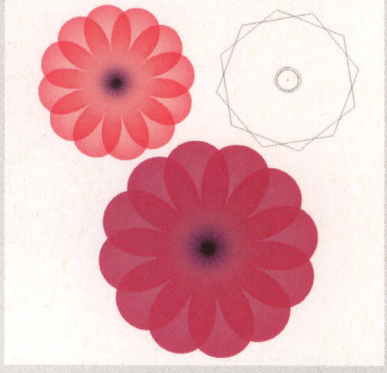
Utilise the Effects menu to create striking elements with a few easy steps



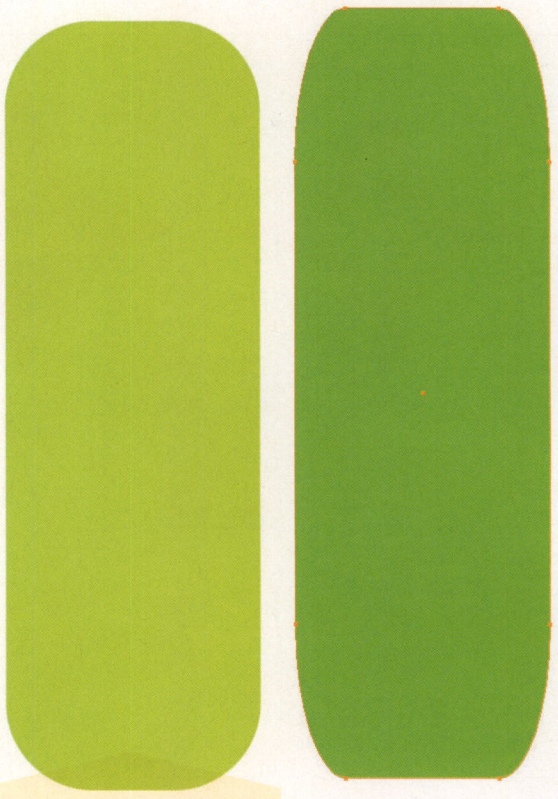
01 You can create elements within a few easy steps by utilising the power of the Effects menu. To create these flowers, first draw a polygon and give it a colour of your choice. This will form the basis of your petals. Draw a small ellipse in the centre of the polygon, and then an even smaller one. Colours aren't an issue at this stage, as we are just drawing the basics of each shape.



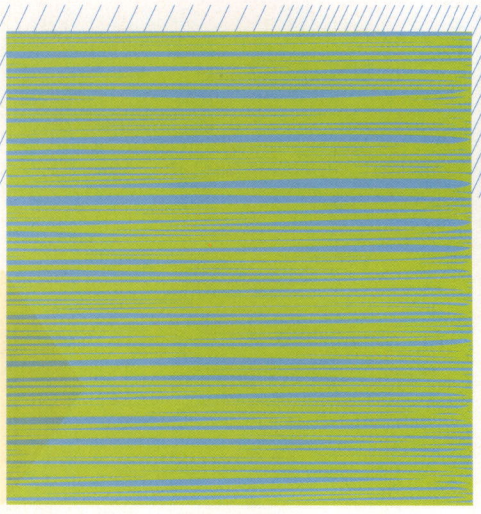
02 With the large polygon selected, go to Effect>Distort & Transform. Apply a Pucker & Bloat effect to it with around 62% Bloat and you should end up with a six-petaled flower. Apply a Gaussian Blur to the larger ellipse, and another Pucker & Bloat effect for the smaller ellipse in the centre, this time at -81%. Duplicate and rotate this to form the stamen.



03 Now it's a matter of personal preference: adjust the colours and layer styles to suit the look you are after. Here the stamen is set to Multiply and the colours tweaked slightly. For the outer petals, an Inner Glow has been added(Effect>Stylize>Inner Glow) as well as a subtle texture, and the transparency adjusted. The shape was then duplicated and rotated, with both set to Multiply, which helps them 'pop'. You can see how the effects look in Outline View (Ctrl/Cmd+Y)



Effects will **scale with the proportions of the shape** they are applied to

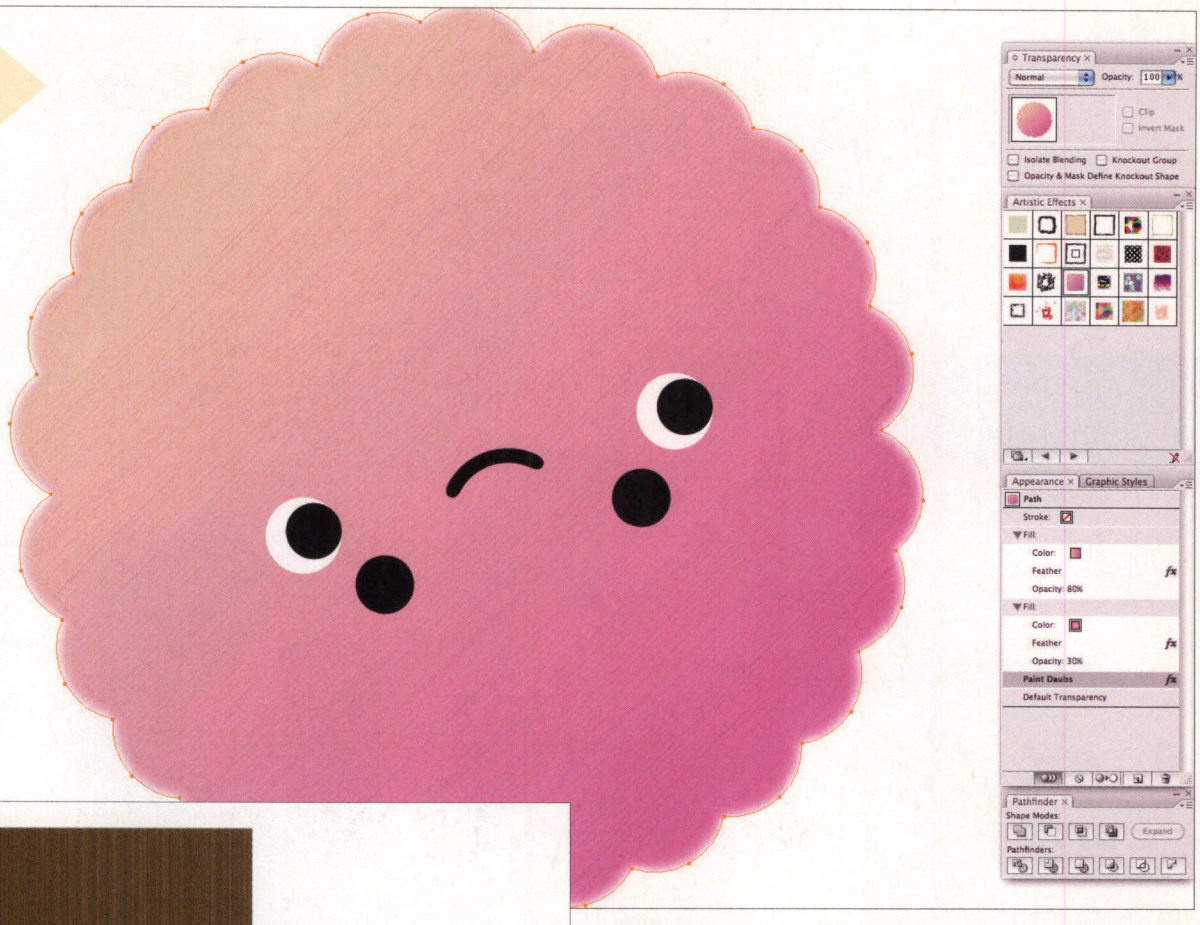


Graphic styles can be great for **applying the same treatment to more than one shape** more quickly and easily

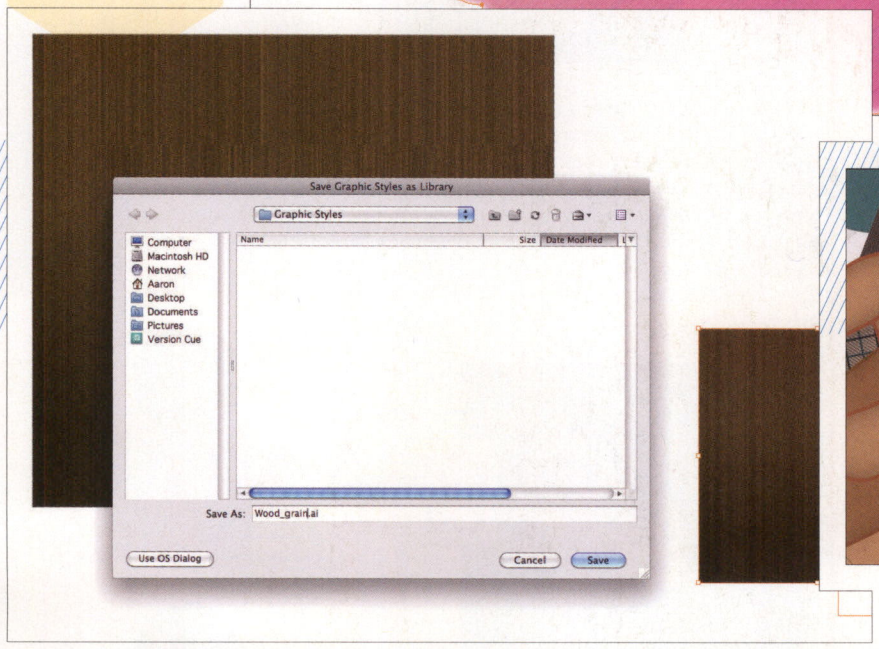
→ shapes in Outline View (Ctrl/Cmd+Y) and you can see that the object with the effect applied to it is still an ellipse – just with an effect applied to its appearance. Whereas the ellipse on the right, the one with the filter applied to it, has been turned into a new shape. If you look in the Appearance palette you can see how effects are applied and you can duplicate an effect, add a new one or delete it.

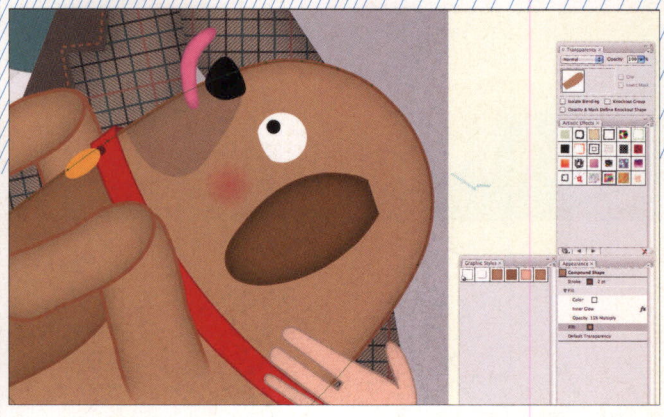
Once you've mastered how the effects work, it's time to start using them to your advantage. The Round Corners effect is an essential design tool. It can help add uniformity to a series of shapes, and can be edited at any time so it is much more convenient to use than drawing the shapes using the Rounded Rectangle tool, for example. If you compare two objects – one, a rectangle with Rounded Edges applied to it (light green); and the second drawn using the Rounded Rectangle tool with the same corner radius (dark green) – you will see, again, that they initially

The Appearance Palette will **break down an applied Graphic Style** to be edited or adjusted



Graphic Styles can **speed up your workflow** and create a resource full of useful styles



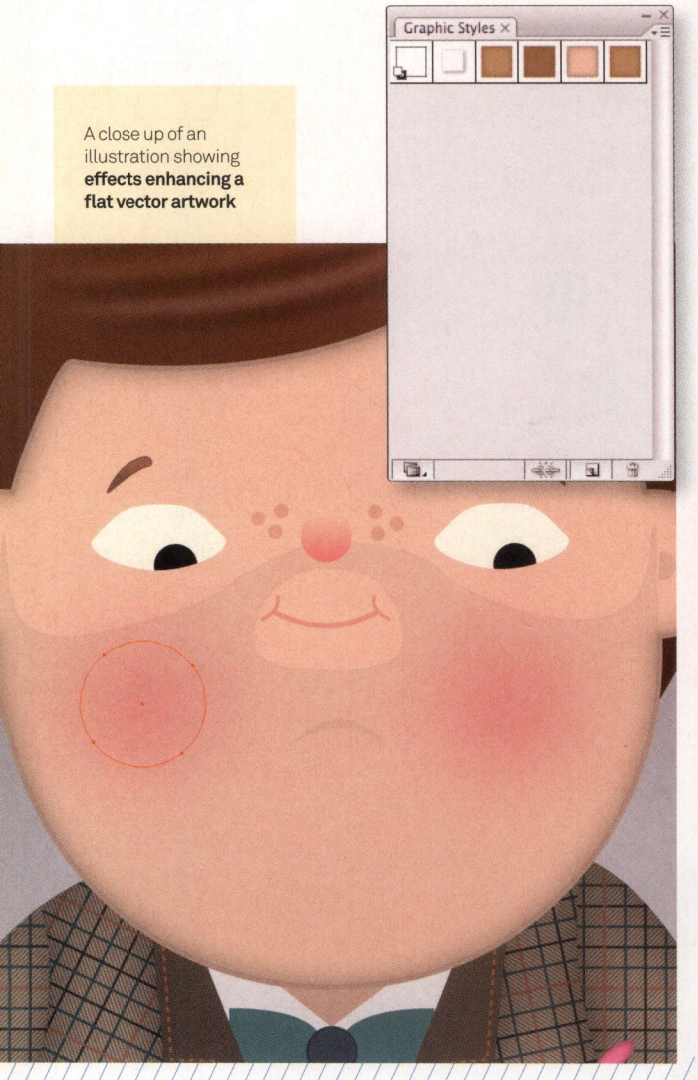
look identical. Until you look at the objects in Outline View, that is, as before, or attempt to stretch or alter the size of the object using the Selection tool. In the screenshot (page 33) you can see how the object has been distorted, compared to the one that has an effect applied to it, which remains in proportion and accurate.

Effects can be used to make drawing objects simple – for example, if you wanted to create a bicycle wheel with some roughness added to it, rather than keeping the tyre as an ellipse with a 2pt stroke. The Pucker & Bloat effect can be used to achieve this, but be sure to experiment with the settings as even the slightest adjustment can alter the appearance of an object.

Graphic styles are similar to layer styles in Photoshop. They enable you to save a collection of effects as a style that can be used over and over again – the perfect resource for speeding up your workflow. To access the Graphic Styles palette, go to Window>Graphic Styles. The palette opens with a small set of default styles. You can apply graphic styles by first selecting an object (or objects), and then clicking the chosen style in the Graphic Styles palette. To replace the graphic style on an object with another style, simply click on a new one.

To load a set of graphic styles, choose Open Graphic Style Library from the fly-out menu, and pick any library from the pop-up menu – the examples shown here have artistic effects applied. A new palette will appear with the new library, and you can now apply any style from the new library that you've just opened, and it will be added to your Graphic Styles palette. Once you've created a new style that you want to save, simply drag the object into the Graphic Styles palette, then choose Save Graphic Styles from the fly-out menu.

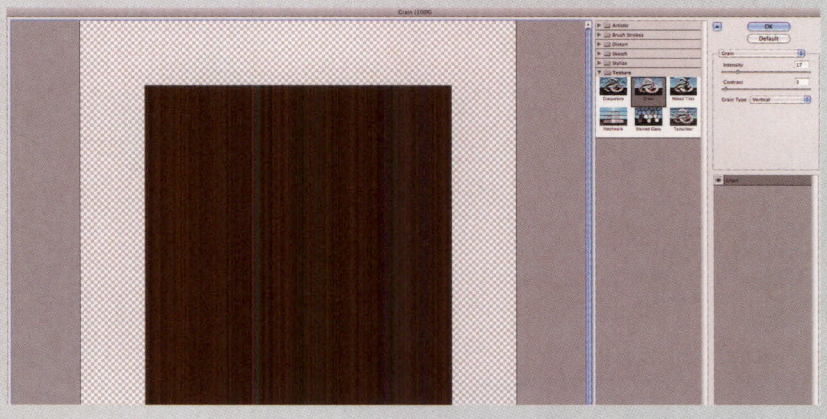
Graphic styles are very effective for applying the same treatments to more than one shape in a very short amount of time. You can use them in illustrations that require the same →



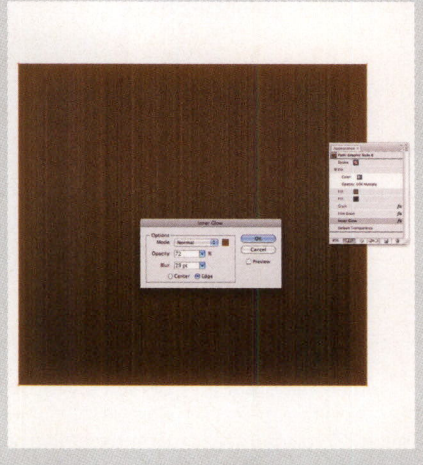

A close up of an illustration showing **effects enhancing a flat vector artwork**

# Apply a textured wood-grain effect

Get more from Illustrator's built-in textures in your illustration projects to add depth and interest



01 A realistic wood grain effect can be very difficult to achieve. However, applying Illustrator's texture effects can add extra realism to flat-looking vector work. You could scan in some textures or import a wooden texture into your document and run Live Trace, but sometimes the details are lost. Usually the textures are converted and appear messy and too 'digital'. Simply select your object, go to Effect>Texture>Grain and explore the settings.



02 Remember that you can adjust the transparency of an effect in the Transparency palette, as well as layer effects and fills. Here, two different types of textures and various fills for the object have been applied, as well as an Inner Glow. There is no right and wrong here – everyone has a different creative eye. Once you're happy with the treatments that you've applied, drag the shape to the Graphic Styles palette and save it for use in future projects.

03 This wood grain style can be applied to objects whenever you need it. In the example used here, you can see how it helps tie up the illustration. The beauty of graphic styles is the ability to apply, edit and remove them without affecting the original object.

→ stroke, a fill or some effects such as inner glow and textures. If you were to apply these separately to each shape it would be very time consuming.

Illustrator's Effects menu is bursting with different treatments for your work. We've covered some of the important functions, techniques and creative applications here, all of which can be used to make your workflow more efficient. However, experimentation is key to learning about all the options available and really speeding up your ways of working, so explore and see how much time you can save.

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**01 (Opposite)** This typographic piece, called Unanswered Questions, **was created using Illustrator** and designed for Quotes, a small US-based T-shirt company

# Steven Bonner

## The award-winning designer and illustrator explains his creative process and how he utilises Illustrator to create his striking images

**Steven Bonner**
Designer, illustrator and typographer Bonner works from his home studio just outside Stirling, Scotland. He studied graphic design and worked as a designer and art director for various design agencies before setting up on his own in 2009.
www.stevenbonner.com

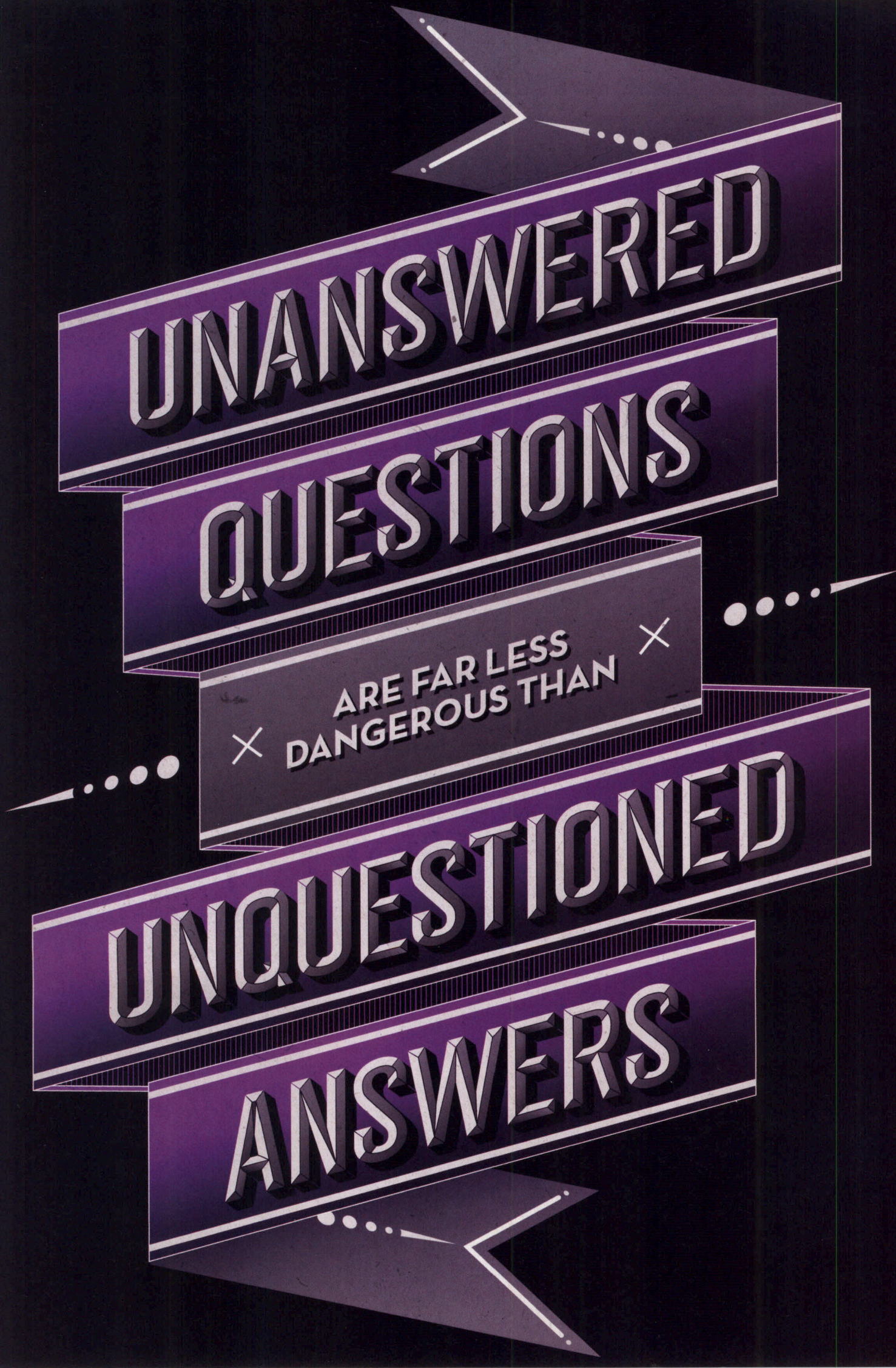
**For designer, illustrator and typographer Steven Bonner, inspiration for his work comes from his love of imagery made before the computer age.** "I love hand-painted signage and all manner of lettering that comes from a craftsman's hand," he explains. "I try to emulate that in some way through my work. Computers can sometimes make things too clinical and I like the natural imperfections that work created by hand has. Even though I work mainly on the Mac, I try to infuse an element of handmade craft into what I do."

Working predominantly in Illustrator –although he also uses Photoshop and InDesign for textured finishing and page layouts respectively – crafting an image is what is important to Bonner. "I always begin my work with a sketch – a process that is hundreds of years old – but now rather than picking up a brush to render the final piece, I use a Mac," he explains. "The process is the same, just the tools differ."

Bonner studied graphic design and worked within design agencies for a number of years before going solo in 2009. Since then he has gone on to become more of a creative all rounder exploring the worlds of illustration, pictorial and illustrated type, and typography. "When I set up on my own my original plan was to carry on solely with design-related clients, but within months I realised most of my work was coming from clients looking for illustrative pieces, mainly clothing companies who knew my hobby work from threadless.com and got in touch for T-shirt designs," he explains.

"Things evolved organically from there with no real strategy. I just did what most independents do and took more or less what was offered," he continues. "However, after a while I became more focused on the things that I wanted to pursue, and started gaining more editorial and advertising work."

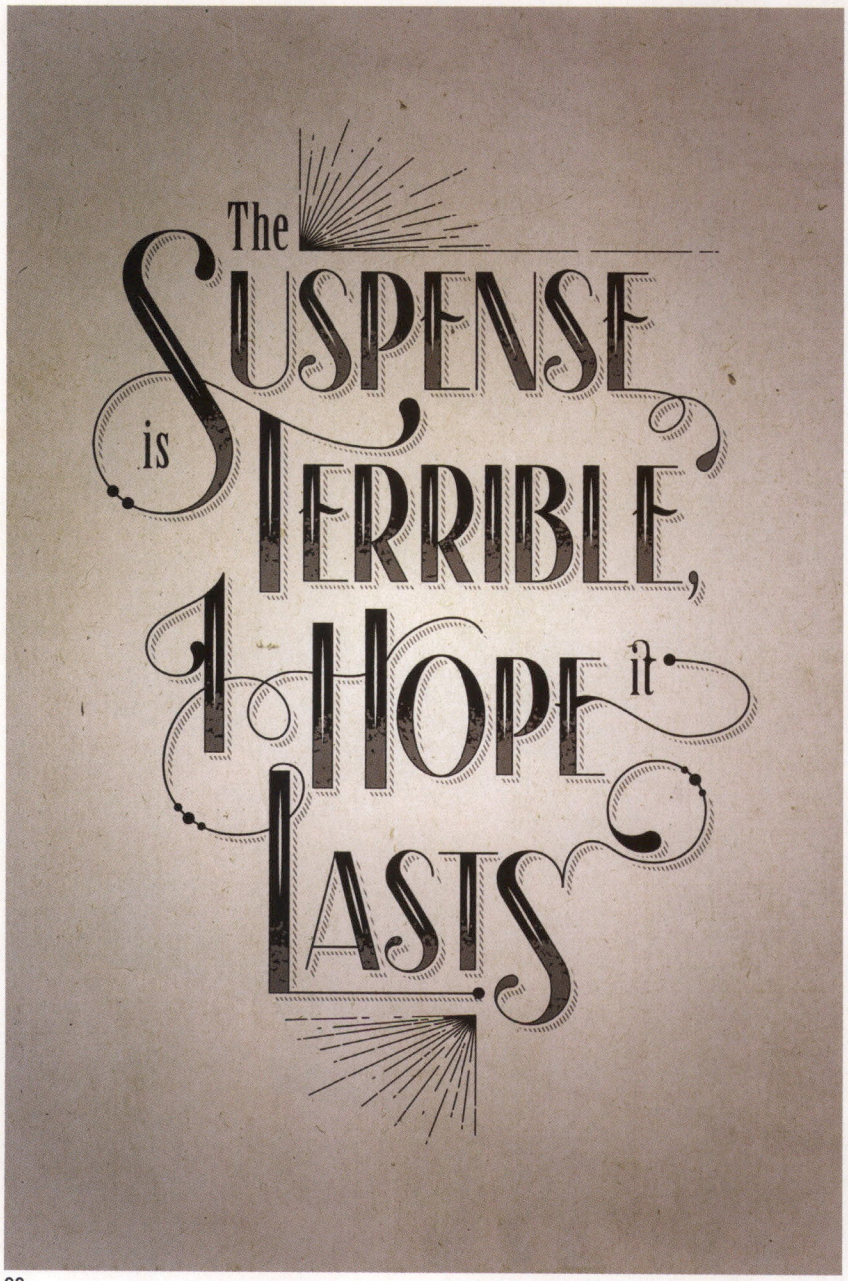
Today Bonner is best known for his illustrated type and lettering, as well as his logo design – working for clients including Diesel, Penguin and *The New York Times*. His illustration style is clearly born out of his design background, in that he prefers to use as simple a shape as he can to get his message across. "I want the viewer to understand the image quickly so it works as a piece of communication first →


UNANSWERED
QUESTIONS
ARE FAR LESS
DANGEROUS THAN
UNQUESTIONED
ANSWERS

**02** Part of the same range of Quotes tees as Unanswered Questions (page 39), Suspense was **inspired by old black- and-white thriller movies**

**03** Shown here is a print **designed exclusively for sale at Print Xyndicate**. It is titled You Should Go Outside and Play Now and was created using Illustrator

**04** This is a personal image entitled The Essentials. **It details the general items** that Bonner needs day-to-day for both work and play

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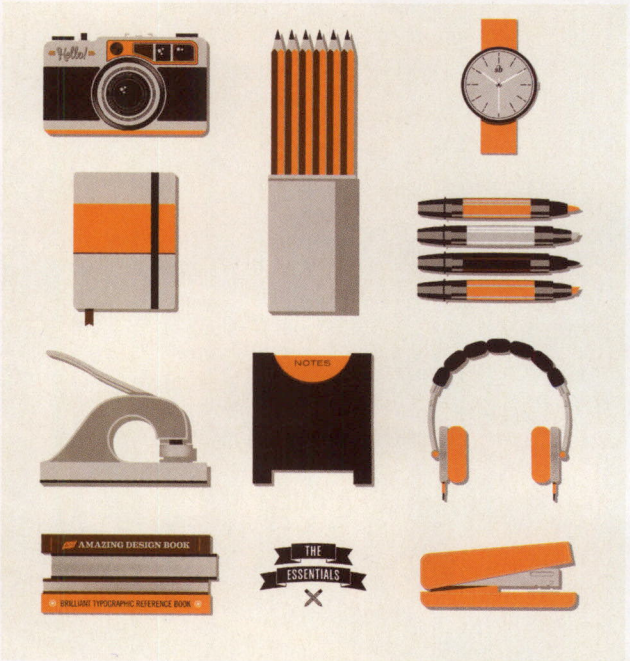



04

→ and foremost," he explains. "I'll embellish the image once I'm happy that it works on a basic level but I try to keep everything simple – both colours and shapes."

Bonner's creative set-up comprises a pencil, paper, DSLR camera, iMac, Adobe CS5 (mainly Illustrator) and a Wacom Intuos3 graphics tablet – a fairly standard set-up, but one that works well for his needs. Of course, Illustrator is the software tool of choice for many designers and illustrators for a number of different reasons, but it appeals specifically to Bonner because of its ability to produce scalable images and for its intuitive nature. "As an everyday designer you need to be aware of where and how your work will be used further down the line so logos need to be scalable and the same goes for type, Illustrator is perfect in that regard," Bonner believes. "And it's also intuitive. There can be a bit of a learning curve to get proficient with its more in-depth tools but, in the main, it has a great 'pick up and play' feel about it that makes experimentation easy. I'll often be playing around with features I've never had cause to use and stumble across something that I can use as part of a new project. It promotes evolution."

Typically Bonner's creative process begins with drawing pencil sketches, before moving into Illustrator for vector work and basic colouring. Final shading and texturing is usually completed in Photoshop. "Visually, I love the slick finish of vector curves and the crisp images that Illustrator produces," he explains. "As for specific tools, the Pathfinder palette is one

**05** This pictorial type illustration won *The Art Book*'s Gold Award, and was used on its cover. It marked a development in Bonner's style **from flat colour to more textured gradients** that he uses now

**05**

of the greatest developments ever. It's been there for years but I use it in almost everything I do, and my projects would take twice as long without it. Couple it with the standard Beziér curve tool and you've got pretty much all you need to start creating some great work.

"I'm very taken with the Width tool in Illustrator at the moment," he adds. "It makes flourish work much simpler than before and as a workflow tool, it cuts the time it takes to draw varying stress in lines by at least three quarters. Illustrator works for me because I'm very measured in my work and tend to use grids for more or less everything, including illustration," he adds. "By contrast though, I frequently ignore them when I think it's necessary. Too many designers are slaves to grids. For me a little imperfection gives a design character."

Bonner's illustrated type and logos have graced many a book, magazine, T-shirt and billboard, but one of his most significant pieces of work has to be his Gold Award-winning pictorial type illustration, which was used on the cover of *The Art Book* 2010: "I don't normally take on competition projects, but I had some down time and would only have been working on personal work anyway so it all seemed to fit nicely," he explains. "There was essentially no brief, so I decided to experiment a little. To this end this image marked a definite evolution in style for me, where I developed a lot of the techniques that I now use daily."

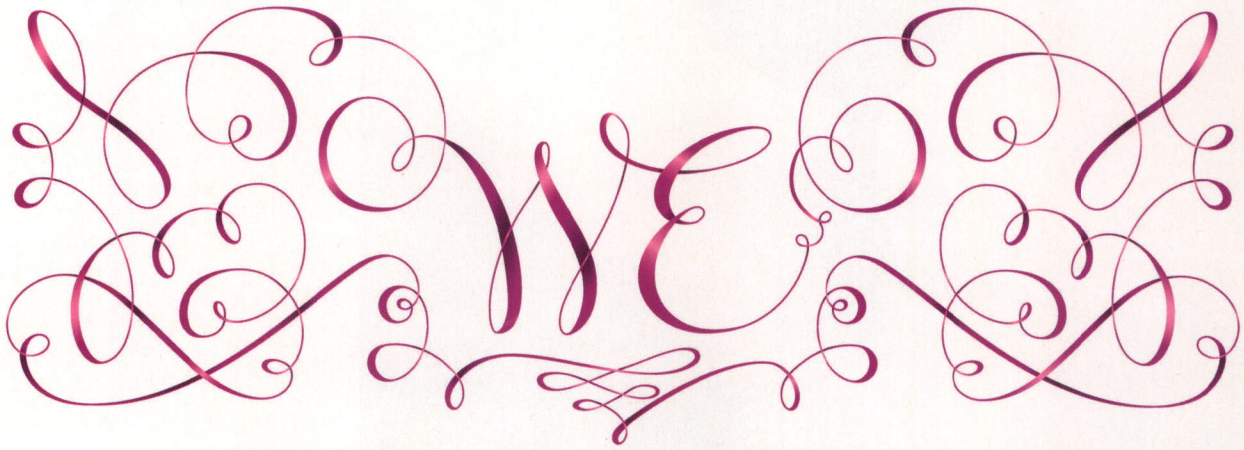
It was during the creation of this project that Bonner started to use the technique of digitally airbrushing stencils in Illustrator, then using them to mask areas in Photoshop to →

**06** This illustrated lettering, The Royal We, was created for *The New York Times*' On Language column. Its design was **inspired by regal crests and ribbon type** to show the use of the royal 'We' in everyday language

**07** Santa's Day Job is a promotional image for an exhibition that Jelly, Bonner's agent in the UK, held at CHI&Partners last Christmas. Like much of his work, it was created using both **Illustrator and Photoshop**

**08** This promotional image, entitled Believe and You Shall Achieve, was created by Bonner for Jelly as part of a promotional drive to **tie in with the London 2012 Olympics**

**09** Bonner's editorial illustration for *The Ride Journal* demonstrates his **use of Illustrator's Warp tool** on the type, with final texturing done in Photoshop




06

SANTA CLAUS Gift maker, delivery man, joy bringer.
NICK NOEL Ornithologist dedicated to the scientific
study of the natural history of birds. Conservationist.

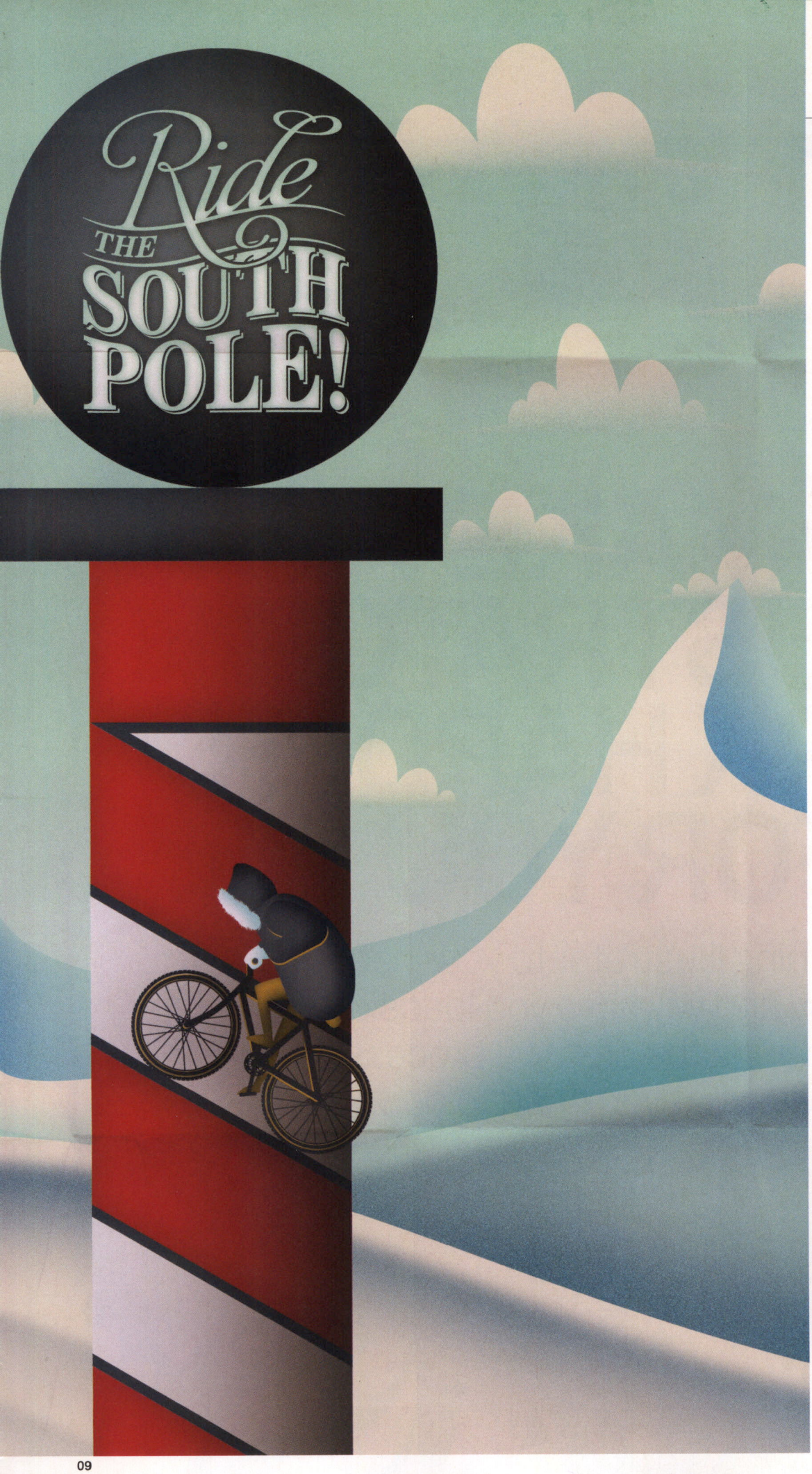
07

08

→ give a soft, diffused appearance to them. "I already had an image in my mind of the finished piece, and then it was just a case of figuring out the best and most efficient way to produce it," he explains. "I was really pleased with the results in that first piece, and it's a technique I now use regularly. It's really begun to define a lot of my work."

As well as his illustrated type Bonner also works on and creates a significant amount of lettering – something he enjoys above all else. "Lettering has something that really satisfies every side of my creative persona," he explains. "If I'm feeling formal I can draw letters to classic proportions, measuring everything and abiding by the rules, and if I feel experimental there are a million ways to render a glyph. Lettering is endless and as long as people keep commissioning me I'll keep working."

Most recently Bonner has completed work on a lettering-based book cover design for one of the UK's literary heavyweights, featuring some pretty special production touches created using Illustrator. He's also recently begun creating more physical work, venturing into product design, with some exciting projects in the pipeline over the next year.




09

## Bonner's pro tips for type and illustration

### 1 Design type using grids

For classic typographic forms, grids are invaluable for achieving consistent line widths and curves. You can set the size of your grid in the preferences for fine control. Be careful, though: if you're making italics, it pays to create your own bespoke guides rather than relying on Illustrator's basic vertical and horizontal lines. Similarly, use the grid to establish your baseline, x-height and so on early on.

### 2 Slice up ellipses

Make use of Illustrator's basic toolset to create smooth curves, then cut and connect the shapes using the Scissors and Direct Selection tools rather than drawing them yourself. This method will create simple transitions for those less comfortable with Beziér curves.

### 3 Smoother Beziér curves

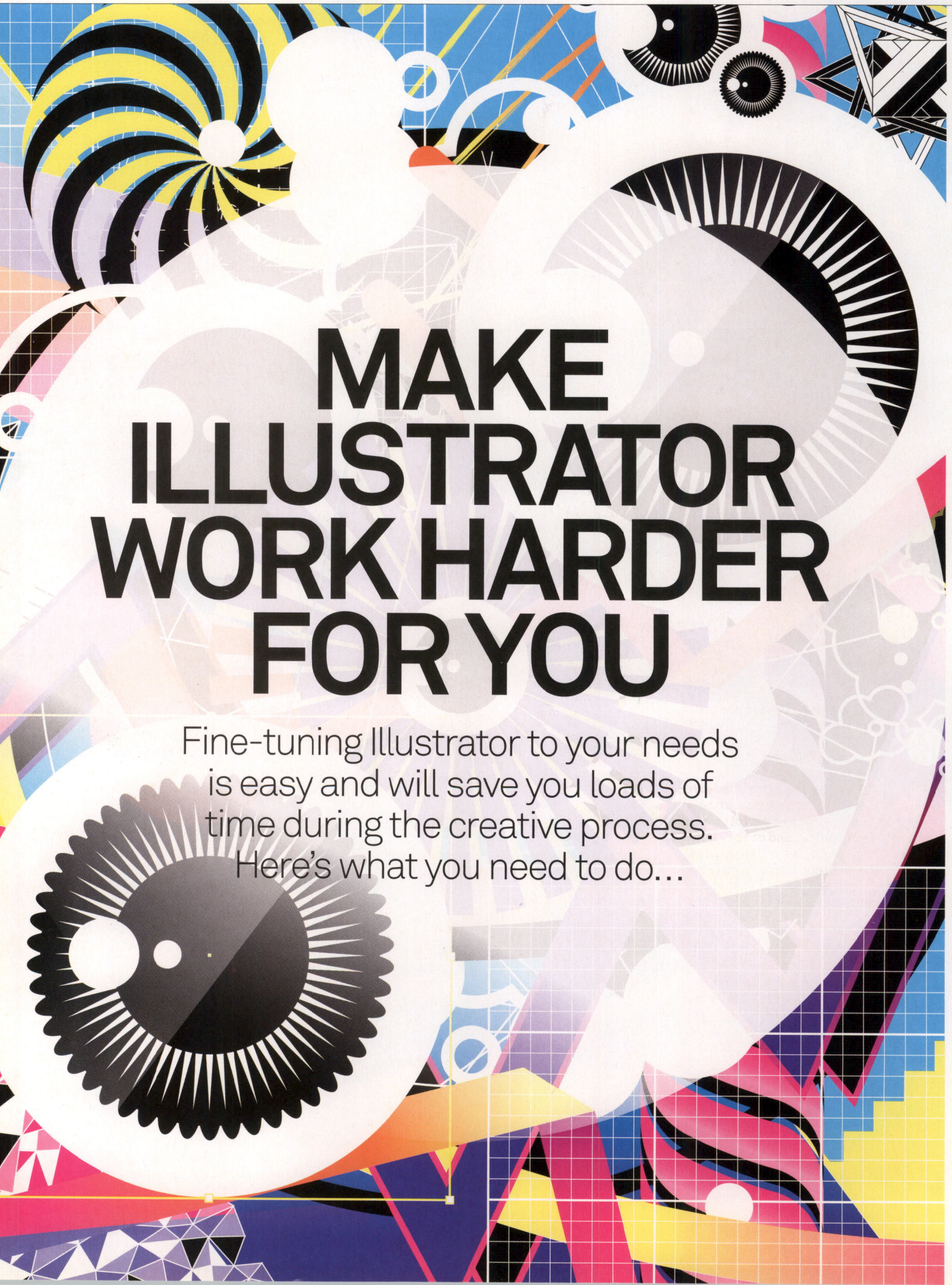
Try to keep the distances of the curve's handles from the actual lines quite consistent, as it promotes smoother and more natural curves. If your handles are all different lengths then you're going to run into problems with your shape at some point. Also, try to keep the handles pointing along horizontal and vertical paths as much as possible as it gives you more control over consistency, which is paramount in lettering.

### 4 Pathfinder letterforms

This is invaluable for building shapes quickly before refining them later. You can build whole letters by combining or intersecting a few simple shapes. For example, use the Intersect option with a cycle and a rectangle to create a rudimentary serif that can be used again on each different letterform. Be aware of basic typographic rules and the properties of each individual glyph – one serif does not fit all.

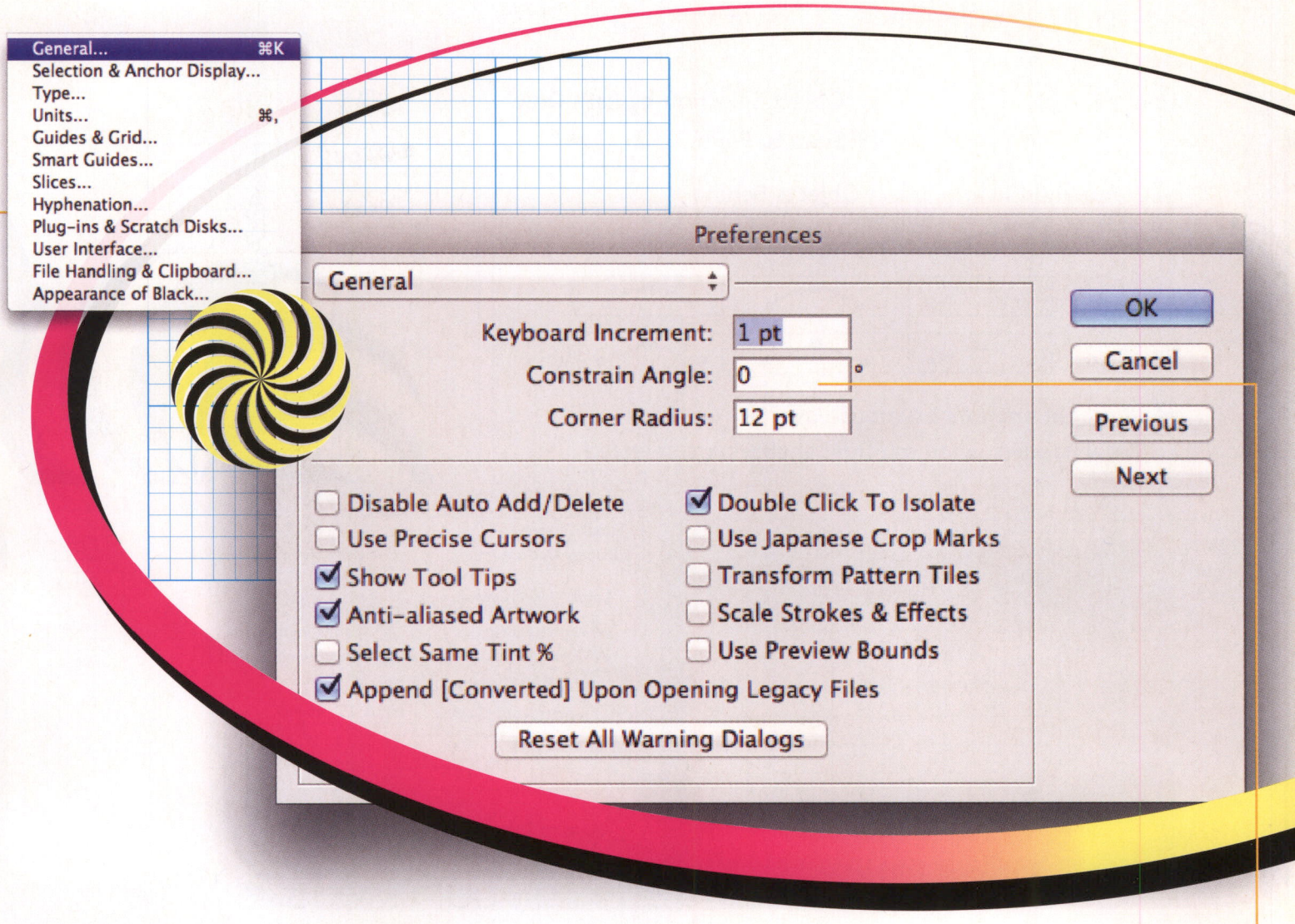
### 5 Get more from colour

Make use of Illustrator's capacity for colour and transparency to lift a piece. You can add hyper-realistic shadows with falloff by combining gradients with opacity masks and create instant colour schemes with its Kuler integration. There are no quick tips to make your work better, but plenty of possibilities for you to realise what you have in your head and get it on screen or in print.



# MAKE ILLUSTRATOR WORK HARDER FOR YOU

Fine-tuning Illustrator to your needs is easy and will save you loads of time during the creative process. Here's what you need to do...




**Illustrator has gained a whole load of functionality in recent releases – from multiple artboards to perspective grids and more – but a powerful tool is nothing unless it's in the right hands, and ones that know how to use it.** Creative work aside, one of the key ways to get the most out of the application is to set it up to work in the way you want it to. There are many ways to customise Illustrator – from brushes to symbols, workspaces and templates – but a good place to start, on a global level, is by adjusting the application's preferences.

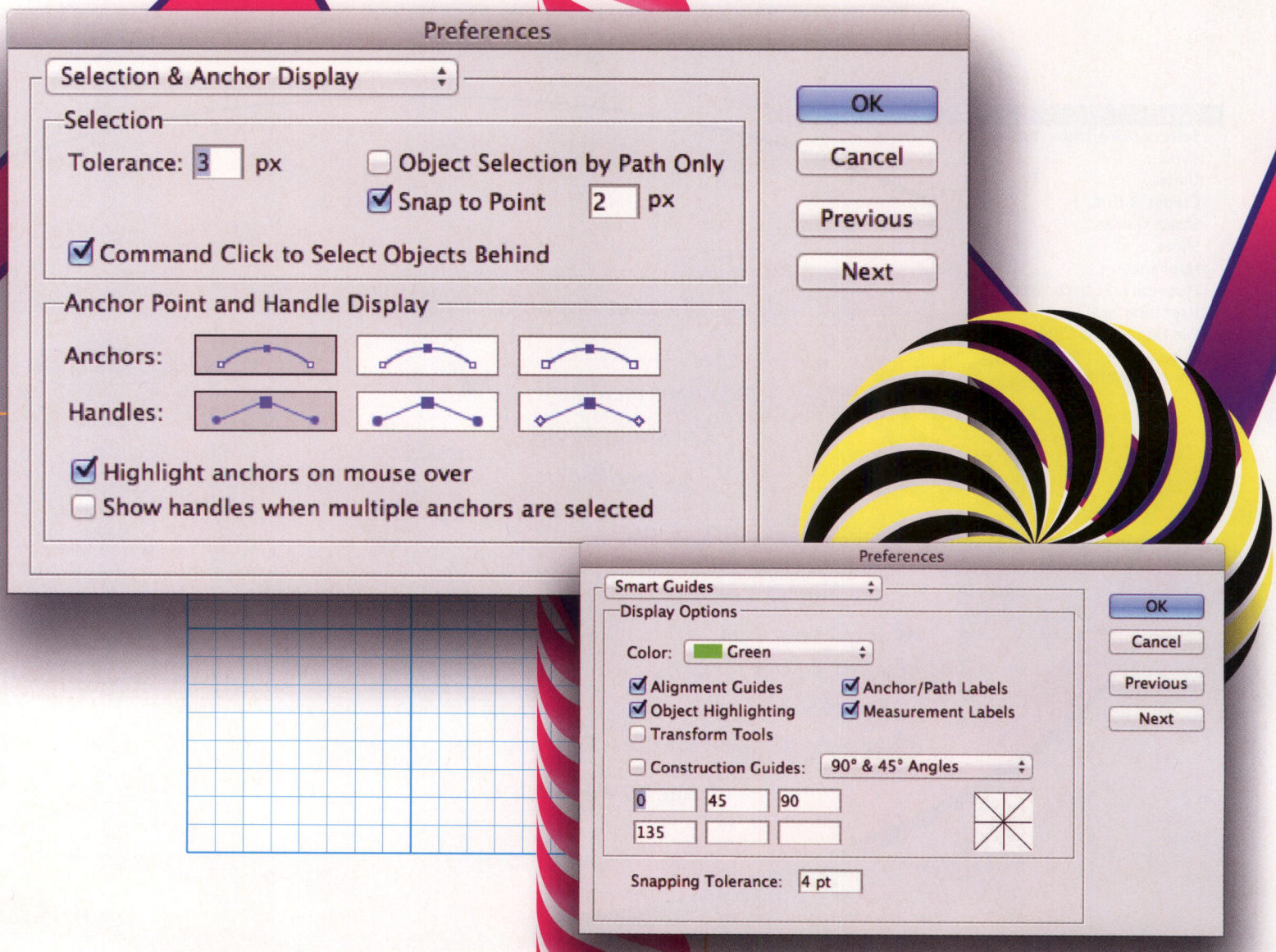
Yes, it's a little dull, and you probably don't usually even think about how adjusting Illustrator's preferences can affect your workflow. But the fact is, by tweaking all the different settings you'll find it is set up the way you want it to work, and you won't hit any stumbling blocks in your creative processes – or at least not with the software. Taking 10 minutes to work through the preferences will undoubtedly save you a lot more time than that, so let's look at the options.

The first preference pane, General, gives you real control over how Illustrator handles cursors, scaling, effects and more. The three fields at the top are important. Firstly, Keyboard Increment enables you to set how far an object shifts when you nudge it using the arrow keys. The default is 1pt (or 0.3528mm), but you can change this to suit the way you work. Remember that, when in Illustrator, hitting Shift and the arrow key will nudge the object 10 times the increment you set here.

The Constrain Angle option is also incredibly handy and, we're guessing, probably something you've never used. If you want to create artwork that all follows the same angle – like a graphic spanning across a poster, for instance – instead of drawing everything and then rotating, you can constrain your drawings to a certain angle by altering this preference field. Of course, as you're working you can change this back to 0 degrees to draw normally again.

The third field, Corner Radius, sets up the corner radius of the Rounded Rectangle tool on a global level. You can change this as you work by selecting the tool, clicking on the artboard and then adjusting the number in the dialogue that appears.

The other options in the General pane are relatively straightforward. You can disable Auto Add/Delete, meaning that the Pen tool no longer automatically adds and deletes points on a path. This is handy for when you want to draw paths on top of each other, although you can temporarily disable this function by holding the Shift key when using the Pen tool. In addition, you can also use precise cursors instead of the standard ones and scale →




→ strokes and effects as you scale objects. To take into account the tint percentage when using Select>Same> Fill, check the box.

The next Preference pane gives you control over how to select objects and points, and how you view anchors and handles. It only takes 30 seconds to set up – choose the tolerance of the pixels you want when selecting points (how near or far you need to click near a point to select it, for example), whether you want to select a filled object by clicking on its path (you may want to do this when working with many overlapping filled objects), and the distance away from a grid or guide that you want an object to snap to. You can also quickly specify the display size of anchor points and handles, whether anchors are highlighted when you hover over them or handles are shown when multiple anchors are selected.

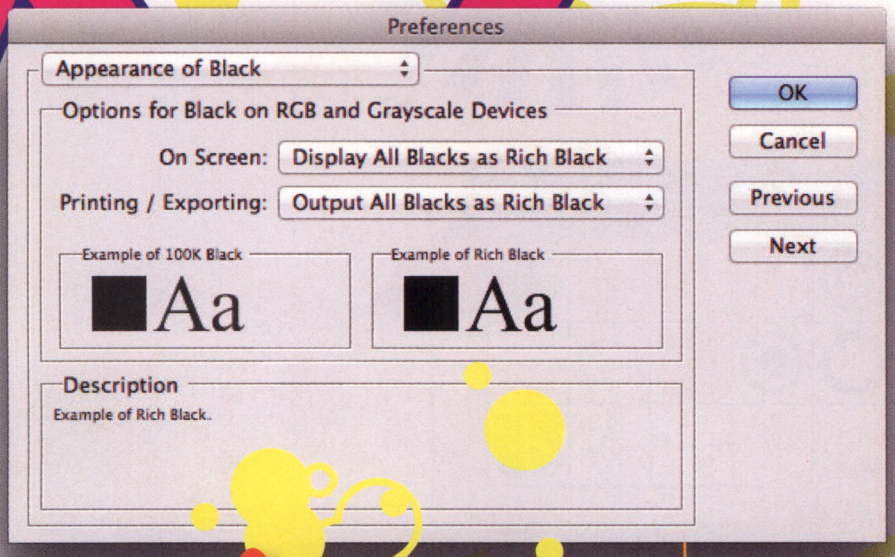
Type is relatively straightforward as well, and unless you do a lot of typographic work in Illustrator then you might want to leave the options as they are. Still, it's handy to be able to change size, leading, baseline shift and tracking on a global scale. Changing the Font Preview to Large is always a good idea, giving you a better view of the typeface in the Type menu preview. Units is similarly simple, and really depends on the type of project that you're working on.

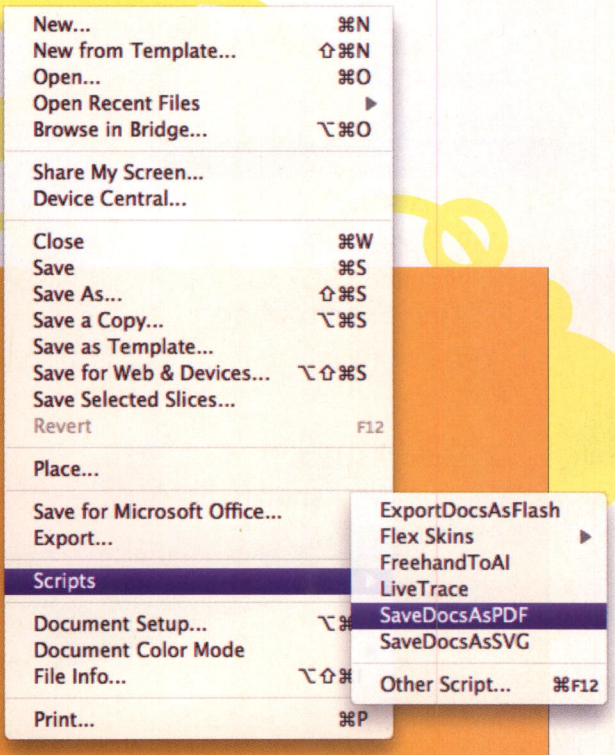
In Guides & Grid you have the option to change the colour of your grids and guides, as well as set up a global preference for the size and subdivisions of your grid. You can also choose to hide the pixel grid you get when zooming above 600%.

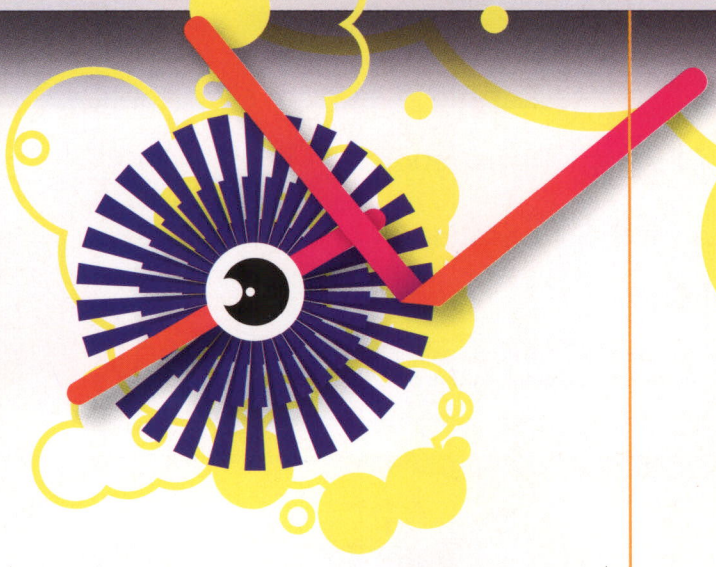
The Smart Guides pane is far more interesting. This essentially gives you reference points, helping you align and rotate objects correctly, and much more. You can choose which kinds of guides are displayed, from alignment guides to measurement labels. You might want to turn off object highlighting as it can sometimes be a bit annoying.

You can also specify construction guides – showing guides as you draw a new object. You specify the angles at which you want guidelines drawn from the anchor points of a nearby object. This may be an option you set on a project-by-project basis, but it's good to get a grip on what construction guides do.

Slices is an extremely simple pane that enables you to specify the colour of the slice – when constructing web mock-ups – and whether numbers are shown. Hyphenation is straightforward too, giving you options to specify a default hyphenation dictionary and exceptions. Plug-ins & Scratch Disks gives you options to specify an additional plug-ins folder as well as primary and



secondary scratch discs, and the User Interface pane gives options to change the brightness of the interface as well as auto-collapse icon panels and open documents as tabs.You'll probably want to uncheck the latter unless you prefer this way of viewing your documents.

File Handling & Clipboard isn't as dull or useless as it sounds – you can specify to use a low-res proxy of a linked EPS to speed up your process – and is incredibly important if you're using Illustrator as part of a wider Creative Suite workflow, as you can specify how objects are copied to the clipboard. If you're drawing paths in Illustrator and want to paste into InDesign you'll need to change the AICB option to Preserve Paths.

Finally, the Appearance of Black pane enables you to specify how you want your blacks to be displayed, making sure you have no mix-ups when you send work to print. Rich Black is set by default.

If at any point in the setting-up process you feel like you've made a real hash of your preferences, or you can't remember how to get a certain setting back, you can easily revert back to Illustrator's default preferences. To do this, simply do one of the following: either press and hold Ctrl/Cmd+Alt/Opt+Shift when you start Illustrator, or you can remove the AIPrefs (on Windows) or Adobe Illustrator Prefs (Mac) file instead – easy.

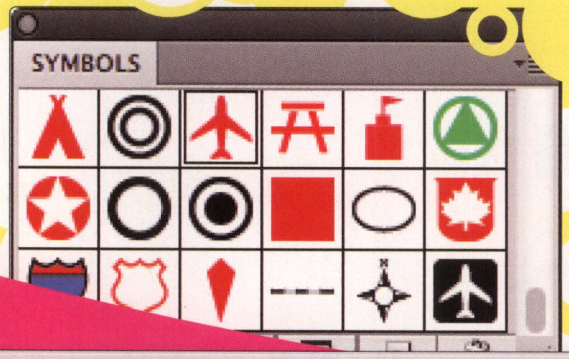
# Using scripts in Illustrator

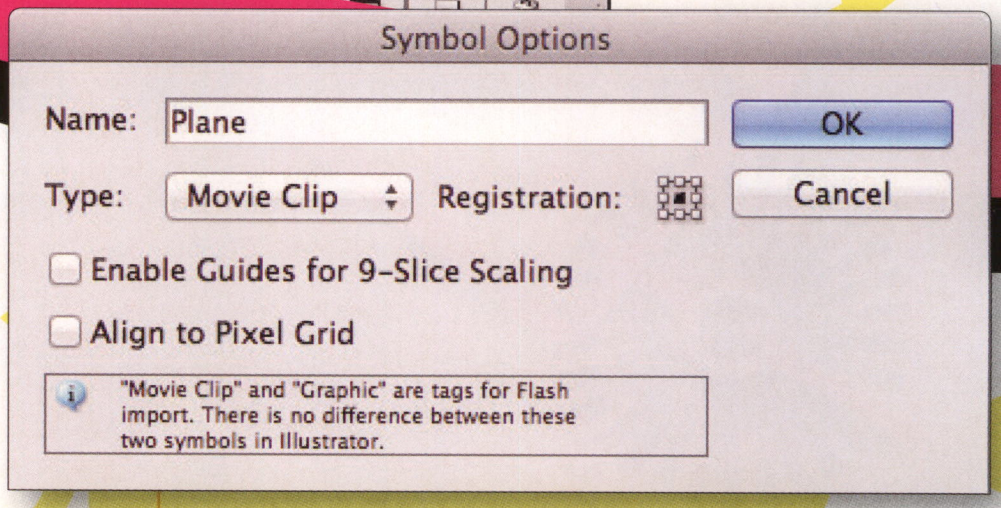
## Scripts provide a very simple way to automate common tasks...

Just like in Photoshop, Illustrator comes with a number of scripts that you can execute to automate common, or maybe mundane tasks. Found in the File>Scripts menu, by default there are a number of very useful scripts – but a quick Google search will bring you far more, for pretty much anything you could imagine.

The default scripts in Illustrator CS5.1 are as follows: ExportDocsAsFlash – for quickly exporting your document as an SWF file ready for Flash editing; Flex Skins – enabling you to create themes for Flex; a very handy FreeHandToAI script enabling you to search for FreeHand files and convert them to native Illustrator documents; LiveTrace – which informs you that you can batch trace images using Bridge; and the self-explanatory SaveDocsAsPDF and SaveDocsAsSVG.

You won't use scripts that often, but when you do need to convert files, save out many documents at once or perform another batch operation, they can prove very handy indeed.





Symbol Options
Name: Plane
OK
Type: Movie Clip
Registration:
Cancel
Enable Guides for 9-Slice Scaling
Align to Pixel Grid
"Movie Clip" and "Graphic" are tags for Flash import. There is no difference between these two symbols in Illustrator.

There are, of course, several other ways to customise Illustrator to your needs. You can, for example, set up workspaces – as you can across the entire Creative Suite – so that the interface changes depending on the project you're working on.

You can also change the workspace to resemble other apps – which is particularly handy if you're coming over from a defunct app such as FreeHand (we know, it's a shame). You can choose Like Photoshop, Like InDesign or Like FreeHand.

In addition, there are also other workspaces available by default, including Typography and Painting options. Creating your own is a cinch. Just open or close the panels you want and then navigate to Window>Workspace>Save Workspace. In the dialogue box that appears, give it a name and you can then select it from the Window>Workspace menu.

The next way to customise Illustrator is to create a library of brushes and symbols that you can use across projects. These can be saved as libraries that can be shared across a team, so it's worth setting them up as soon as you can. Symbols are extremely versatile, and instances can be quickly sprayed across the artboard using the Symbolism tools, or used more conservatively as icons and the like.

To create a symbol, draw your artwork, select it and go to the Symbol panel. Next, go to the Options arrow and choose New Symbol. Name the symbol, turn it into a graphic if you wish (although there's actually no difference in Illustrator – movie clips and graphics are just tags when exporting to Flash). And then hit OK. Your symbol will appear in the Symbols panel.

You can save the library and share it across teams using the same Symbol panel options flyout. Creating brushes is similar – see page 20 for a pro guide on doing both of the above and applying them to your designs.

Illustrator can be fine-tuned to your workflow, no matter what kind of project you're working on. It takes a bit of time, but doing so is invaluable in making the creative process a lot smoother.

# Illustrator presets

## Improve your Illustrator experience further by editing its presets

### TRANSPARENCY FLATTENER PRESETS

Like all of the presets mentioned here, the Transparency Flattener Presets options can be found in the Edit menu. All of them follow pretty much the same format when it comes to the dialogue that opens, which holds all of your saved presets. By default they are: High Resolution – for final press output and for high-quality proofs; Medium Resolution – for desktop proofs and print-on-demand documents; and Low Resolution – for quick proofs that will be printed on black-and-white desktop printers.

Clicking on each of these will show a read-out of the settings in the box below. Essentially, if you print regularly from Illustrator you can automate the flattening process by using these presets. Clicking New presents a dialogue in which you can fine-tune options to your requirements – including 'Line Art and Text Resolution' and 'Gradient and Mesh Resolution'. When you're happy, give it a name and hit OK. It will then be shown in the Overprint and Transparency Flattener options in the Advanced section of the Print dialogue.

### TRACING PRESETS

If you often use Live Trace for specific types of images, it can be beneficial to set up tracing presets. To start with, it might be worth placing an image, going to the Control panel, hitting the arrow next to the Live Trace button, choosing a preset and seeing how it traces your raster image. Once you've found a setting that's close to what you want – there are many presets, such as Black and White Logo, Comic Art, Detailed Illustration and so on – go into the Presets dialogue from the Menu, click on the preset of choice in the list that appears and hit the Edit button. You can then fine-tune the tracing effect to your exact needs. In the dialogue that appears when you hit Edit, keep the Preview button checked to see how the changes are affecting your trace (you'll need your raster image selected to do this).

### PRINT PRESETS

If you've used InDesign, you'll be familiar with print presets. They are, very simply, a way of automating printing when you want to output with different settings and at different qualities for different outputs. Hitting New in the Print Presets dialogue brings up the Print Preset Options dialogue. Choose your settings for your desired output, including Marks & Bleed, Size, Scaling and so on. Name the preset at the top (for example 'Studio B+W printer') and then hit OK. To access the print preset, go to Print and choose it from the drop-down menu at the top.

### ADOBE PDF PRESETS

Very similar to print presets, PDF presets enable you to set up Illustrator to export different kinds of PDFs without having to tweak options every time. To create a new PDF Preset, go to Edit>Adobe PDF Presets and hit New. Then, like in the Print Presets dialogue, specify the options you need for a particular output – in this case including Compression, Marks and Bleed and Colour Conversion. Name it, save it and when you want to access the PDF preset it will appear at the top of the Save dialogue when you choose Adobe PDF as the file format.

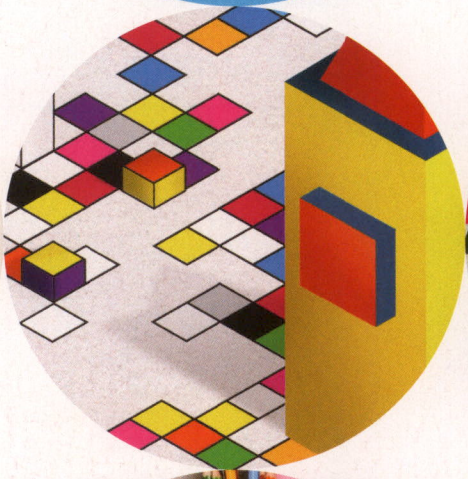
### SWF PRESETS

If you regularly export Illustrator files to SWF for use in Flash, it's essential to set up the SWF presets. There aren't any by default, so after going to Edit>SWF Presets, hit New and work through the options. You can choose whether to export the entire AI file to an SWF file, AI Layers to SWF frames, AI Layers to SWF Files, All Layers to SWF Symbols and AI Artboards to SWF Files. You can also specify which Flash Player version, and such options as exporting text as outlines and including unused symbols. Hitting the Advanced button gives you more control over JPEG compression, resolution and frame rate. Once you're done, name the preset and it will appear in the SWF Options dialogue after choosing to export your file as an SWF. Access it from the drop-down menu at the top.

### PERSPECTIVE GRID PRESETS

The final presets option in the Edit menu is for fine-tuning perspective grids. This will probably be your least-used preset unless your work involves a lot of this kind of drawing. It's handy to have options for creating presets, as you can specify perspective type (one-point, two-point or three-point) units, scale and the viewing angle. You can also specify the grid colour and opacity. Once you're happy, name it and save it. It will then be accessible from View>Perspective Grid. Choosing the preset will change the current perspective grid to the options you specified in the preset.

My
Portfolio



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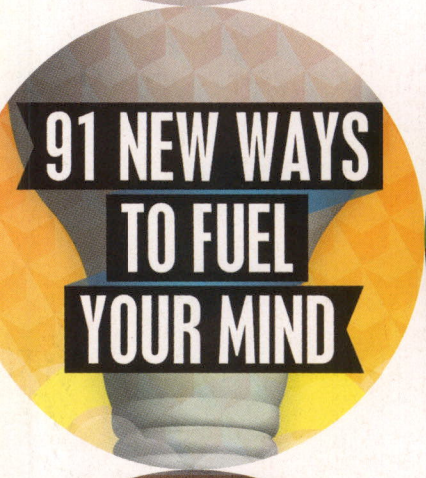
91 NEW WAYS
TO FUEL
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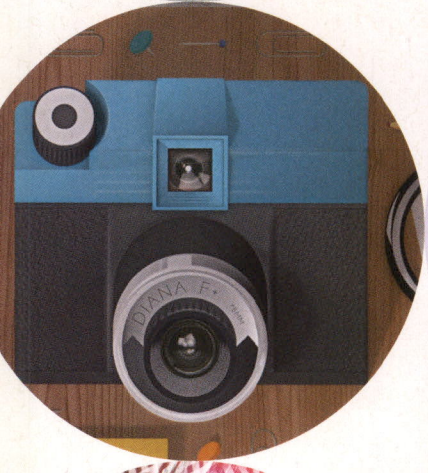

LEARN
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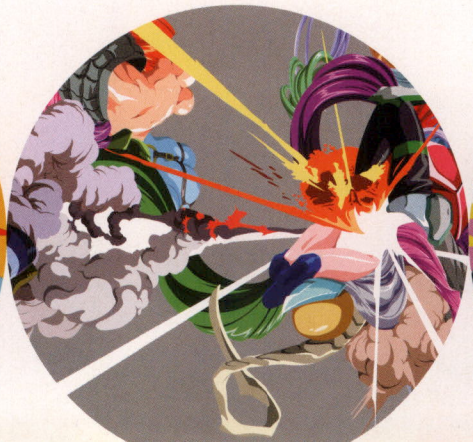

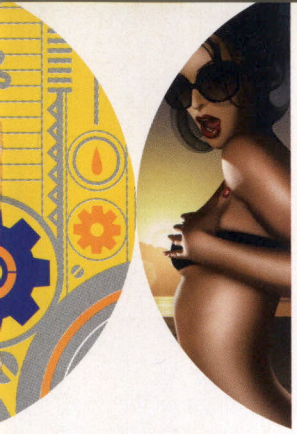

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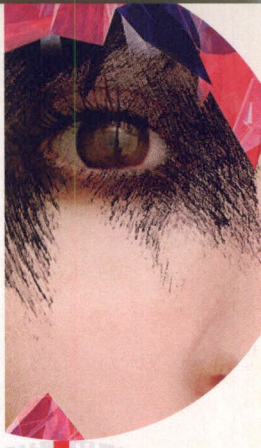
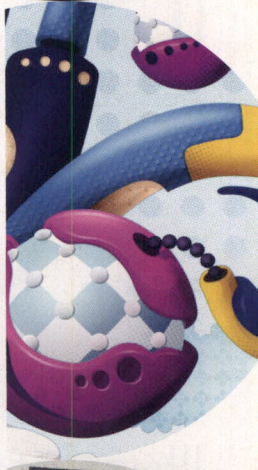
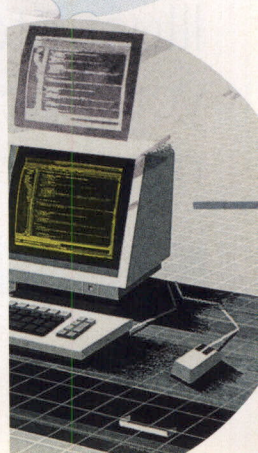
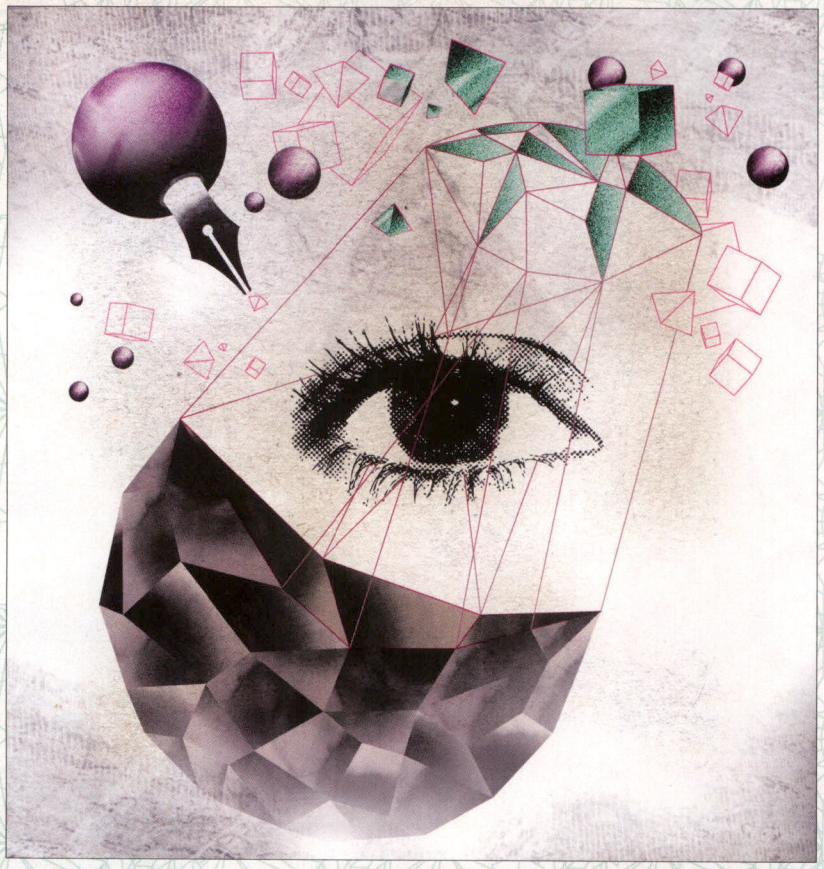




# ILLUSTRATION TOP 50

Harness the full power of Illustrator's tool set and refine your techniques for a smoother, more efficient workflow

## 1 Smooth out your lines

One of the quickest ways to clean up any rough vector shapes or stray anchor points and make your linework a little smoother is to use the Smooth tool, found in the Pencil tool's fly-out menu. You can then edit the tolerance settings for fidelity and smoothness.

## 2 Get more from the Eyedropper

Hold down Shift while clicking with the Eyedropper tool, and Illustrator will grab just the colour from the area you've clicked and apply it to the attribute you've selected – either the stroke or fill. This is useful if, for instance, you've placed a photograph and want to pick out a certain colour to apply to the fill of a shape.

## 3 Set up a Swatch Library

If you often find yourself deleting unwanted default swatches and trawling through previous projects to find the perfect colour that you've used before, then setting up a custom swatch library can save a lot of time, especially if you use a very similar colour palette across different illustrations.

## 4 Tweak gradients quickly

If you use the Eyedropper tool to adjust a single colour slider in a gradient, it replaces the gradient with a fill colour. So, select the shape and, in the Gradient palette, click the colour slider you want to adjust, then Alt/Opt+click on the required swatch in the Swatches palette. Only the selected gradient colour will be changed.

## 5 Duplication shortcuts

Many illustrators duplicate shapes by holding Alt/Option and dragging, but it can be tricky to align them perfectly. Try using Ctrl/Cmd+C and Ctrl/Cmd+F to paste a copy directly above the original, or Ctrl/Cmd+B to paste behind it. Useful when applying effects to separate shapes, or layering objects with masks when you don't want to move the original.

## 6 Apply text to a path

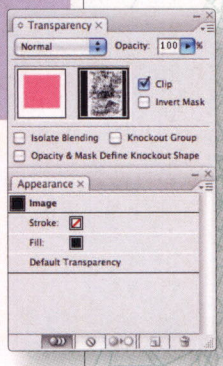
If you find yourself transforming and warping text to fit along a path, remember that Illustrator has a built-in tool for this. Draw your desired path and select the Path Text tool from the Text tool fly-out. Hover the cursor over the path, click, and type whatever you need. Using the Selection tool you can click and drag the cursor to the inside or outside of the circle.

## 7 Know your limits

Illustrator is great for vector work, but if you load it up with too many effects, imported images and complicated colour masks, then it can start to slow

## 8 ADD TEXTURE WITH OPACITY MASKS

With an object selected, go to the Transparency palette, and in the fly-out click on Show Thumbnails, then Make Opacity Mask. Place your texture: anything white will show through, and black will mask out, so bear this in mind when scanning and adjusting textures in Photoshop. This technique is much more effective than Live Trace, which provides a comparatively crude digital simulation with hundreds of anchor points.




down and become sluggish. Know when the time is right to move to an alternative programme: Photoshop can handle the same effects much quicker, saving you time and strife.

### 9 Have fun with colour theory

To quickly tweak the colour of an illustration, go to Edit>Edit Colors for a selection of often underused features such as Saturation, Colour Balance and Recolor Artwork. In the small drop-down menu at the top, you'll find colour harmony suggestions, including complementary, shades and monochromatic.

### 10 Custom strokes with the Width tool

For bespoke outlines, create your linework with the Pen or Pencil, and then use the Width tool to thicken or thin the lines at any point using anchor points. If you're frequently creating lines of a similar style – a pen line that thickens in the middle and trails off like an ink pen stroke, for instance – then save a version of it in the Profiles menu within the Stroke menu.

### 11 Save time with the Symbol Sprayer

When creating random collections of the same symbol, the Symbol Sprayer tool is much more efficient than copying and pasting. For a sky filled with tiny stars, create a tiny white dot, drag it into the Symbols palette, select it with the Sprayer tool and just spray the dots around. They'll be retained as a Symbol Set, but can be split into separate objects by clicking Object>Expand.

### 12 Scale in proportion

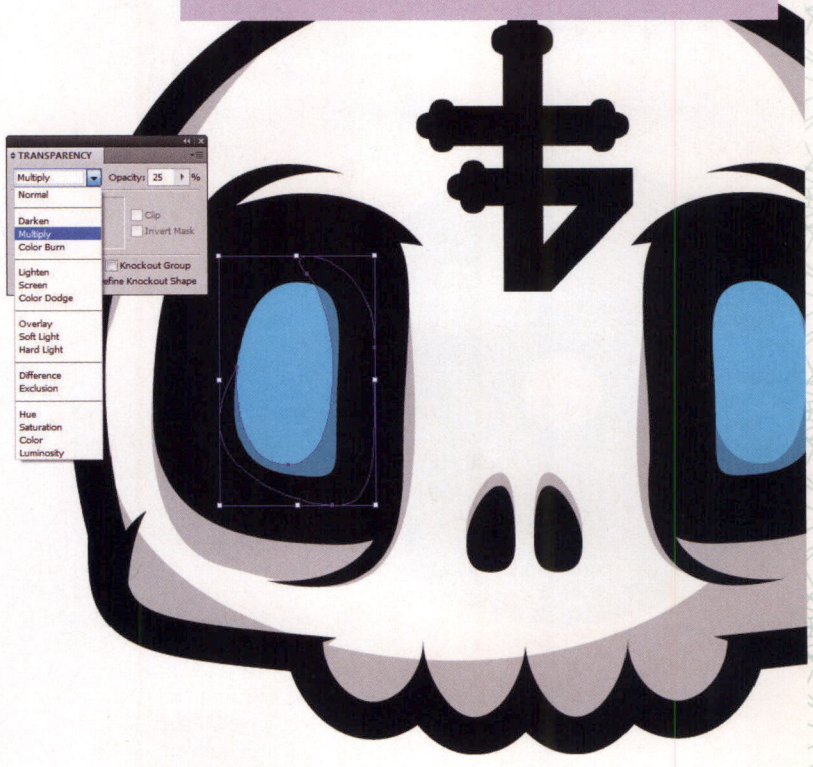
When you're scaling an illustration that has lots of different strokes, brushes and effects applied, double-click on the Scale tool to bring up the Preferences panel, then tick Scale Strokes and Effects. This will ensure that everything is kept in proportion without having to expand anything.

### 13 Lighting effects with Opacity masks

An easy way to add highlights to an object is to give it a black-to-white gradient, and then apply an Opacity mask so that only the white areas of the gradient are visible. You can then re-colour the object, leaving a nice glow. The same technique also works for adding texture using black-and-white Film Grain effects.

## 14 SHADE WITH TRANSPARENCY

When adding shading to your work, rather than using solid shapes in a darker colour, use black set to 25% Opacity and the Multiply blending mode: this gives you a darker tone of the underlaying colour. Play with different blending modes as you see fit – by mixing a solid full gradient with a colour at a low Opacity, set to Multiply, you can create some really interesting effects.



## 15 Master halftone shading

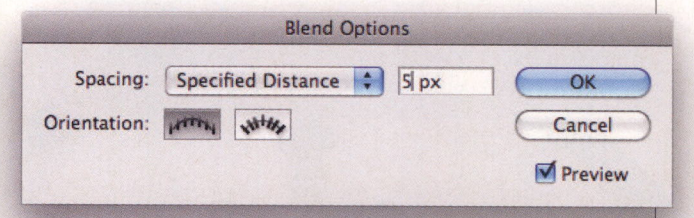
Halftone effects are very popular at present, and can be used to achieve some striking shading techniques in place of gradients. If you're working with a strictly limited colour palette, try using Illustrator's Colour Halftone effect to lay dots of one colour on top of another – red dots on white will give the illusion of pink, for instance.

## 16 Tidy up with the Shape Builder

A long time coming, Illustrator CS5's Shape Builder tool enables you to seamlessly join (or subtract) objects if they overlap. This is perfect for tidying up your files and having far fewer objects in your layers. If you have a layer full of overlapping shapes that are all the same colour and opacity, then highlight them all and use the Shape Builder tool to join them together as one object.

## 17 Save versions of your file

While it's a no brainer to save your files regularly as you work, get into the habit of saving updated versions at various key intervals as well – 'Filename_01.ai', 'Filename_02.ai' and so on. That way, you can experiment in different directions in your illustration and return to a much earlier version easily if need be.



## 18 BLEND WITH CUSTOM BRUSHES

Try combining custom-made brushes with the Blend tool. This technique gives the impression of shadows or light, and in turn can add depth to your work. The spine can be adjusted to cater to the required angle, while the individual brushes remain editable.

## 19 Manage resources across a project

Create libraries of colour swatches and brushes for projects that involve more than one piece of work, and save them in a Resources folder within your project directory. That way, when you start each individual piece you have everything you need at hand, without having to copy and paste elements from one document to another.

## 20 Don't overlook the Pen

Many illustrators rely on the Pencil or Paintbrush tools, but the Pen is invaluable for precision lines and angles. Precise curves can be very handy for shaping hair or getting that exact curve of a sports car front end, for instance. Hold Shift while dragging your second anchor point to get an exact incremental angled curve.

## 21 Print prep with the Pathfinder

When preparing limited colour palette illustrations for print, the Pathfinder's Divide and Unite tools are great features. Flatten any transparency, and then apply the Divide tool to the artwork. Select all elements of the same colour (Select>Same>Fill Color), and then use the Unite tool to combine them all into one united shape. Repeat this for each colour: the file is now almost ready for print, and tweaking colours is incredibly easy on the fly.

## 22 Align with precision

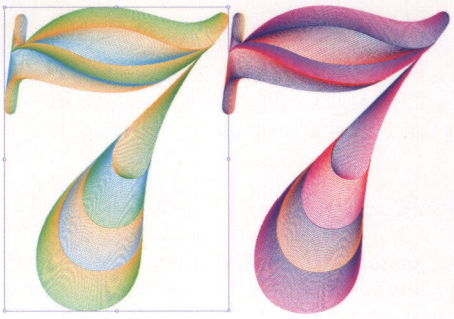
The Align tool can be incredibly handy: use it to 'one click' align objects to the centre of the artboard, align shapes to each other by edges or central points, or even align single points on a shape together. You can align shapes with even spacing, either within their group or justified to the artboard.

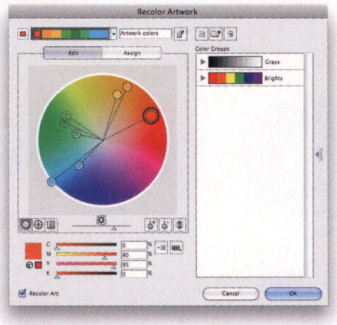
## 23 Colour inspiration

There are some great websites to see colour harmonies, or even specific swatch sets, submitted and compiled by other designers and the public, such as Adobe Kuler. Bring your favourites into Illustrator to add to your custom swatch library – whether collected with the Eyedropper or dragged directly from an existing set in Illustrator.

## 24 Turn PDF Compatibility off

Vector files typically take up less memory space then a regular raster or PSD file, but there's a simple way to make them even smaller for quick and easy storage. A complex pattern could be up to 15MB, which is considerable for a vector. Unchecking Create PDF Compatible File in the Save dialogue can decrease its filesize considerably.






## 25 EXPERIMENT USING RECOLOR WITH PRESET

The Edit Colours>Recolor With Preset gives you the freedom to edit your artwork's colour palette from a simple dialogue box. Choose to edit the palette manually using a CMYK colour split; by random selection using a colour wheel; or even by assigning a pre-existing swatch group. You also have the option to Invert Colours, Turn Artwork to Grayscale or CMYK, amongst others.

## 26 Groups instead of layers

Grouping shapes together (Ctrl+G), such as the elements that make up a character, can sometimes be easier than putting it on its own layer – it gives you more freedom to bring objects to the back (Ctrl+[) or front (Ctrl+]) of other grouped objects instead of moving physical layers, and makes moving a character or collection of elements from one file to another a great deal simpler.

## 27 Get to grips with blends

Blends are great for gradually creating evolving shapes or paths – the tool can be difficult to master, but getting familiar with its behaviour will pay off in the long run. Creating custom spines can help ensure that your blend works exactly as you've planned.

## 28 Build a set of brushes

Custom brushes can be an excellent way to cut down your workload in the long run, if you're prepared to invest time and energy in the short term. They can often take a lot of tweaking and refining at first, but once you're done, you can add them to a library and call on them for future use in all kinds of projects.

## 29 Use custom brushes as shapes

Coupling your custom brushes with Pathfinder effects can yield some very interesting results. Essentially, the Pathfinder effect treats your custom brushes as shapes, which is a really manageable, non-destructive method for creating custom shapes quickly and easily.

## 30 Iron out the kinks

Combining the Smooth tool with the Pen tool on the fly is a great way to get rid of unsightly kinks from paths. The settings can be tricky to manage, but spend some time fine-tuning these for your desired result, and it's guaranteed to improve your efficiency and workflow.

## 31 Paint with a tablet

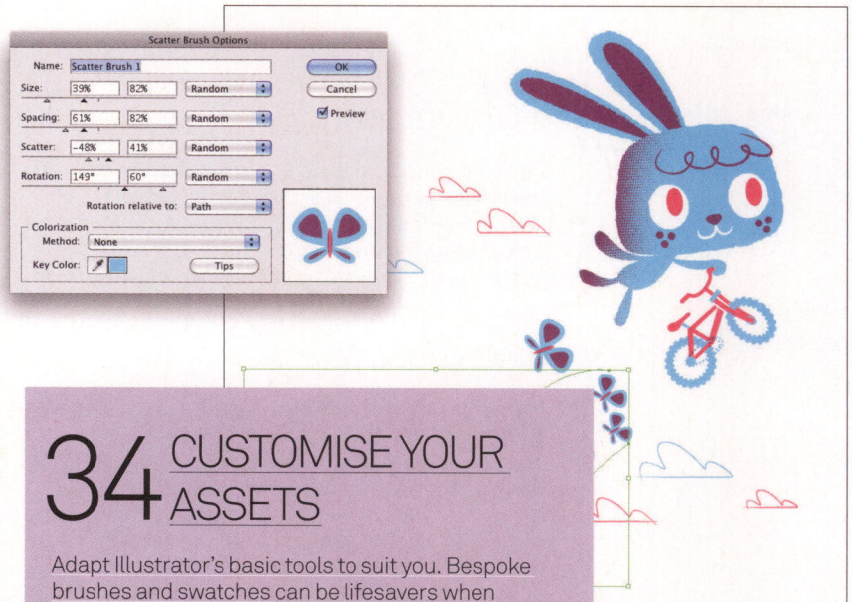
Unless you have an incredibly steady hand, using the Paintbrush and Pencil tools with a mouse will always give unnatural results. With a tablet, however, they can become an integral part of your workflow and are great for adding an organic touch. Combine them with custom brushes, and spend time tweaking and manipulating their anchor points to get the best result.

## 32 Screenprint effects

To simulate a screenprint effect before committing to print, use the Transparency panel. The overlayed colour effect of screenprinting can be roughly simulated with the Multiply option, and an Opacity mask based on a scanned texture can add a distressed look. Familiarise yourself with the mask options, such as Clip and Invert, for a variety of results from the same source files.

## 33 SHADE WITH THE BLEND TOOL

The Blend tool is perfect for creating vector halftones and sawtooth shading effects. Simply draw a line, add a tapering profile from the Stroke options, duplicate it and blend for an instant long-shadow effect.




## 34 CUSTOMISE YOUR ASSETS

Adapt Illustrator's basic tools to suit you. Bespoke brushes and swatches can be lifesavers when creating complex images with repeating elements: a custom swatch can become a texture to overlay on scenery, or a custom scatter brush can be adapted to create a flurry of butterflies – as shown here.

## 35 Play with your palette

With the Recolor Artwork option, you can manipulate your illustration's entire colour palette without any of the distractions of bounding boxes and layer colour outlines; swap colours and fine-tune them; and even convert an image from full-colour to two-colour. Use it as a playground for experimenting with colour mixes once the hard work of illustrating is almost done.

## 36 Mark up your guides

Keep the intended context of your illustration in mind throughout the process. For a commissioned editorial piece, for instance, keep a layer at the top of your Layers panel that includes a white frame around the image and any gutters, margins or other exclusion zones imposed by the job. This makes it easy to see how the final image is shaping up with no bleed, and how it looks in situ.

## 37 When swatches aren't enough

When working with a very limited colour palette, you can make a useful visual guide by setting up a literal palette of square coloured boxes right on the artboard next to your illustration. It's more immediate than the tiny thumbnails in the Swatches palette, and can be a useful reference when using the Recolor Artwork tool.

## 38 Add texture with Live Trace

Many illustrators use Photoshop to add texture to their vector work, toggling between programs, but it's also possible to do this in Illustrator. Live Trace is a great tool for vectorising scanned textures, but these can often feel too messy and 'digital' – get around this by using Opacity masks to make the effect subtler..

## 39 Pucker and Bloat

These are an excellent couple of features, seamlessly helping you to curve (or bloat) sides of straight squares into the shape of a 1960s-style TV screen, or pinching (puckering) the same object into a four-pointed star. More varied looks can be achieved with multi-anchor-point objects, or by combining multiple objects.

## 40 Modify basic shapes with anchor points

You can turn simple shapes into complex editable objects by adding anchor points. Circles and squares are drawn with four anchor points by default: each time you go to Edit>Path>Add Anchor Point, an extra four are added. When finished, remove any excess points – this provides for quick, accurate drawings of triangles, diamonds or round curves with the Circle tool, which may not be as accurate if drawn with the Bezier tool.

## 41 USE GRUNGE BRUSHES TO ADD TEXTURE

In the Brushes menu you'll find a set of vector 'Grunge' brushes that are great for achieving realistic brush strokes, but when used on top of flat shapes can also become a worn texture, as opposed to using highlights, gradients or illustrating textures yourself.

## 42 Save time with Select The Same

In an elaborate illustration, it can soon become pretty tiresome to select all instances of repeated elements to change their stroke width or colour. The Select The Same option is a fantastic way to pick all elements that share a common feature. Alternatively, convert repeated objects into symbols so you can simply modify the main symbol to apply changes across all of its instances.

## 43 Experiment with the Path Blending tool

Convert simple vector shapes into complex textured objects using the Path Blending tool. Split the object into two separate lines, and choose how the paths should interact. The tool also works perfectly when multiplying two objects, blending their colours and creating extra shapes within the blend. The final result will react and re-render with any further changes that you might make to its shape or direction.

## 44 Enhance your linework

If your artwork starts with a simple single-line sketch, you can develop this to make it more appealing and attractive using the Outline Stroke feature. This turns a single line into a four-sided object, to which you can then add any graphical style or gradient colour that you can't with a simple stroke.

## 45 Use Global Colours on commercial jobs

Client changes are inevitable. Setting your colour swatches to Global Colours can help you to alter every colour instance within your artwork to a new PMS or CMYK reference. When preparing for a new commission, be sure to set all of your colours as Global: double-click the colour box in Swatches and tick Global Colour.

## 46 Swatches Library for Exchange

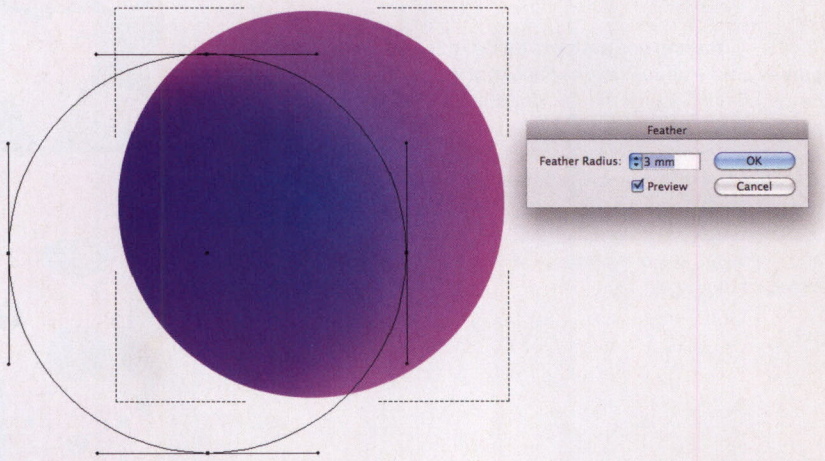
When you have built up a swatch colour library in Photoshop or InDesign, save yourself time importing each colour one by one, or even adding them by CMYK values. Simply just export your current Swatches for Exchange. The .ASE file can then be added to via Open Library in the Swatches Option into your menu.

## 47 Make the most of Opacity masks

Opacity masks have lots of uses, from shadows and fades to more illustrative effects such as simulating wispy hair. Simply copy and Paste In Front the element you want to mask, and colour it with a black-and-white gradient. From here, you can link the two and tweak the fade on the mask separately until you're happy with the result.

## 48 ADD VOLUME WITH THE FEATHER EFFECT

The Feather effect is one of the easiest ways to add a sense of volume to your objects, especially when combined with the Draw Inside tool. Select the necessary shape, click on Draw Inside, draw a shape inside it and select Effect>Stylize>Feather. Then choose your radius of transparency.




## 49 Create flourishes with the Width tool

New to CS5, the Width tool is a great way to create effective flourishes with varying line stress. Draw a spiral and give it a 1pt stroke, then select the Width tool and click and drag at one end of the line for an instant flourish. You can practice with this to create some really complex designs.

## 50 Subtle gradients

Instead of working with solid colour shapes, use gentle gradients instead to magically add a sense of volume. One great trick is to change the transparency of selected gradient colours – used in combination with Illustrator's Draw Inside mode this can add subtle shadows to objects.

Thanks to... Aaron Miller, Ben the Illustrator, Jared Nickerson, Karan Singh, Peskimo, Radim Malinic, Steven Bonner, Zutto

Illustrator CS3 or later

# Create a multi-use pattern

**Fernando Volken Togni** shares his pro technique for designing a four-colour repeat pattern that can be translated across multiple applications

**You can use patterns for wallpaper, book covers, fabric, purses, cars – almost any surface that you can imagine.** But how do you create a design that not only fits together seamlessly, but is aesthetically pleasing as well?

In this tutorial we'll create a repeat pattern that can cover any kind of surface. The pattern in this example will focus on natural characters and creatures, so we'll draw those elements first and then create a composition with them. Using geometric shapes and a reduced colour palette, it's possible to get great results with a modern, cool look.

**Fernando Volken-Togni**

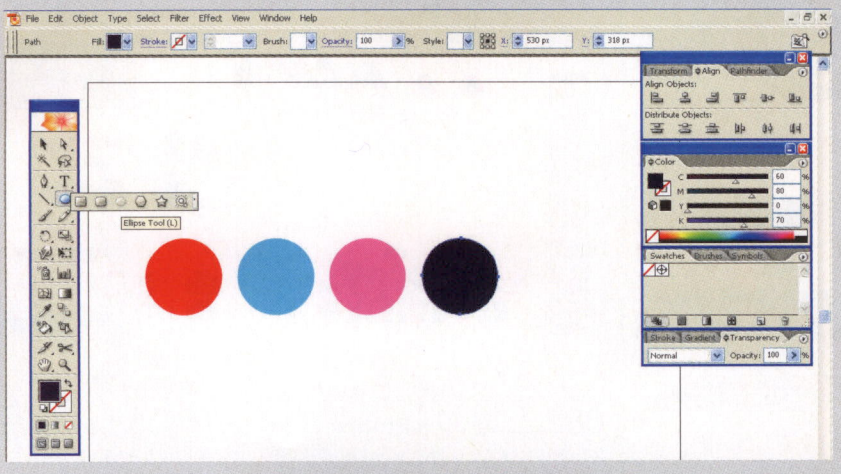
This designer and illustrator graduated in advertising, and now lives and works in Porto Alegre, Brazil. His illustrations have been commissioned by the likes of Quatar Airways, 85Four London and more.

www.cargocollective.com/nandovt

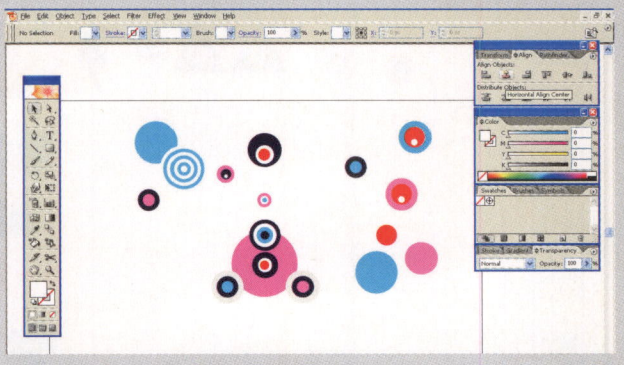
**Time needed**
4-5 hours

**Skills**

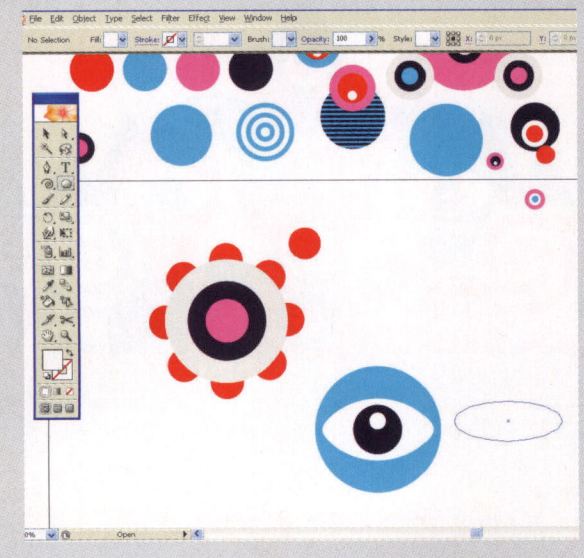
- Create an interplay of vector elements
- Use minimalist shapes
- Construct symmetrical compositions



01____First, set up the canvas as an A4 portrait, choose a reduced colour palette and draw four circles. Ideally you want at least two vibrant colours, one less vibrant and a darker one – I went for red, cyan, pink and dark purple. Hold Shift while using the Ellipse tool (L) to make perfect circles.

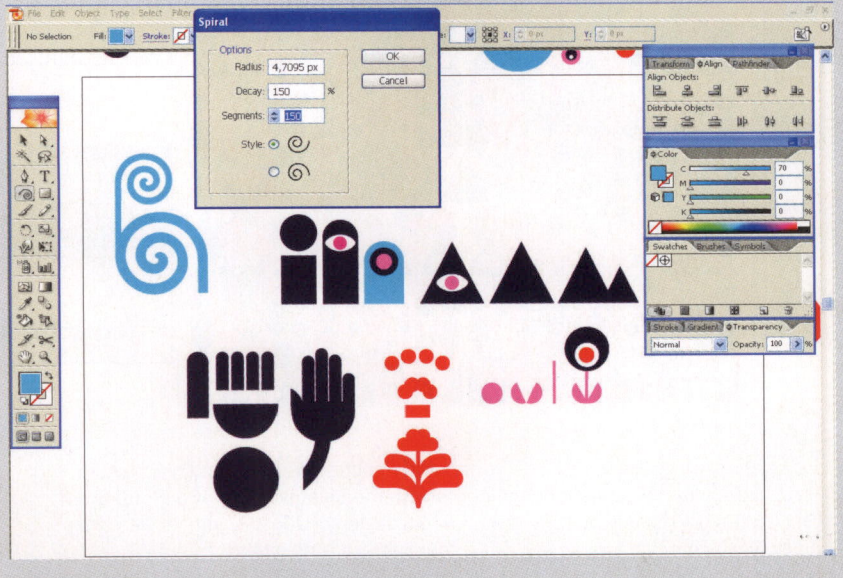


02____Duplicate your circles to create new shapes, such as concentric circles and cartoon-style eyes. Choose randomly from your colour palette for these. Press Alt/Opt and drag the shapes to duplicate them. For concentric circles, select the circles you want to align, then go to Window>Align, and from the Align Objects options choose 'Horizontal Align Center' and 'Vertical Align Center'. You can place one circle inside another, but make sure they aren't all central so you have some variation.

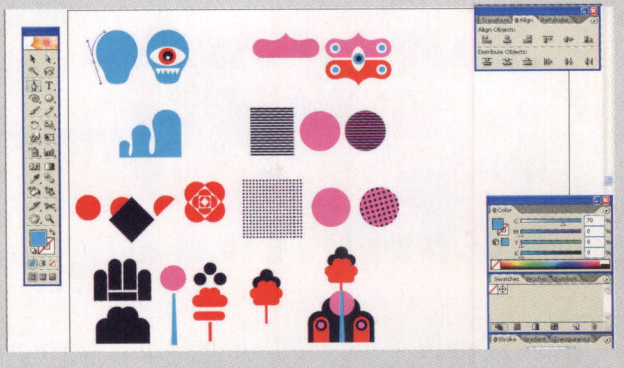


03____Pull these elements out of the canvas to use later, and start creating some new, more complex elements, such as flowers. Take three concentric circles and create eight small circles to surround them. Move them to the back by pressing Ctrl/Cmd+Shift+[. To create an eye, make a blue circle and draw an oval with the Ellipse tool, making the shape slightly flat. Put a purple circle in the centre for the iris and a smaller white one inside to suggest reflected light.

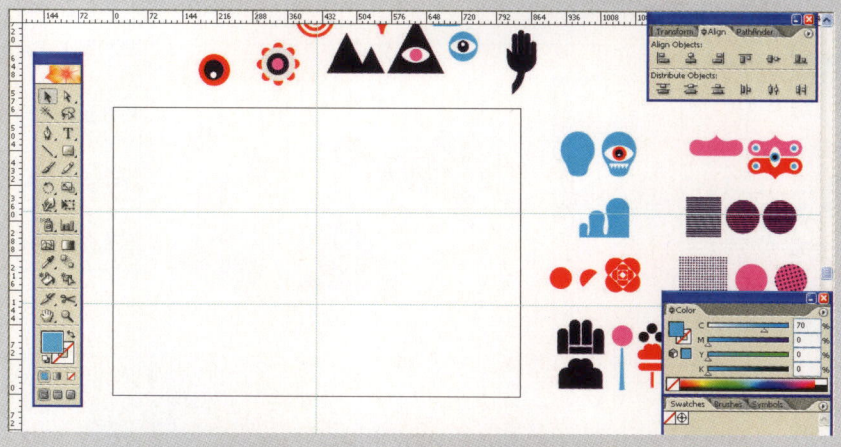
04____Now let's create a bird motif. With the Pen tool, make the shape of an 'S' and join the last point back to the first. Fill the shape and place the eye you created in step 03 on top, resized if necessary. You can also create a bugle shape with the Pen tool, placing a circle on the top and an ellipse at the bottom. For the one-eyed creature, draw a rounded pink rectangle, place a pink circle on top and merge the two objects, going to Object>Expand Appearance to unify the object. I added another eye and drew a purple mouth with the Pen tool.



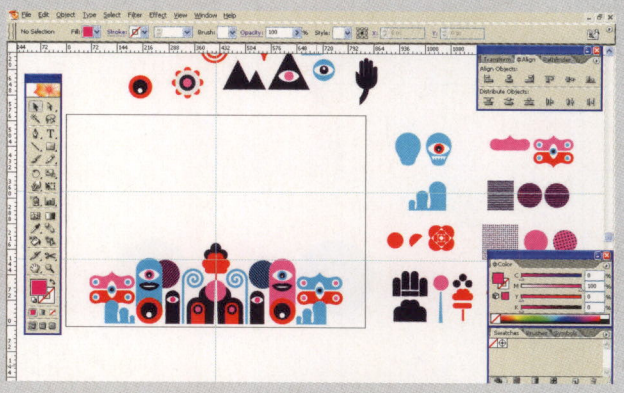

05____A good composition requires multiple elements. Repeat existing ones and change their colour, or merge and cut shapes to create new ones. I've added cyan spirals, a purple creature, a hand, and various triangles and flower motifs here.



06____Now let's create the skull. Select the Pen tool, draw a skull shape and fill it with cyan. Place an eye on top and a line of repeated white triangles for teeth. Continue to make as many elements as you see fit. →



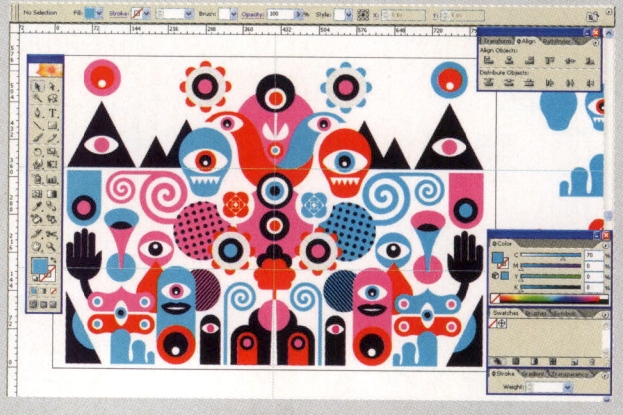
07 Clean up the canvas to begin the pattern structure. Surround the canvas with all the elements you've created, and hit Ctrl/Cmd+R to activate the page rulers. You'll need a six-piece grid on which to arrange the elements, so drag two horizontal blue guide lines down from the top ruler, and drag a vertical blue line from the ruler on the left to the centre of your canvas, splitting it down the middle.



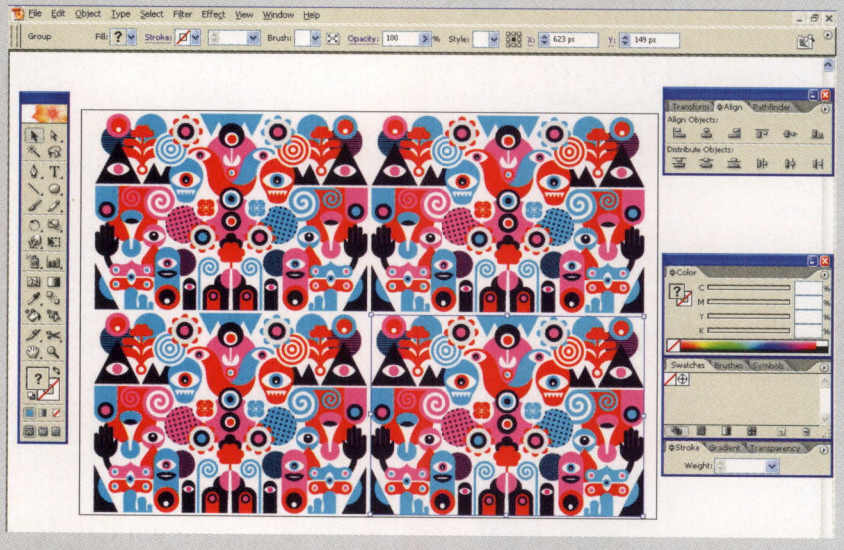
08 We're going to have a symmetrical pattern, so some shapes will be duplicated and have their colours changed during the process. Always start from the middle, and I find it's easier to begin at the base. I selected my tree and placed it centrally at the bottom, then placed other elements with a flat base alongside it. Duplicate all of your elements, so that the two sides of the central line mirror one another.

09 Continue working your way up the canvas, filling it with your elements and always maintaining symmetry. Circular shapes are good for filling blank spaces. Ensure you have shapes of different colours touching each other to create contrast, and introduce more elements if you need to. Flip them horizontally to keep everything symmetrical.

10 Overlap shapes at the centre if you like, as I've done with my birds. To send a shape backwards, hit Ctrl/Cmd+Shift+[.



11 I like to keep my illustrations balanced. To do this, you can work with guides or along an imaginary axis. Visualise vertical lines crossing some shapes, then align the elements by their vertical centre. For example, I've placed circles on the top of the pyramids, aligning each with the centre of the pyramid. Continue until you've filled all the blank spaces.



12 Once you're happy with your pattern rectangle, deselect the line guides (Ctrl/Cmd+;) then select all the elements with the Selection tool and group them (Ctrl/Cmd+G). Pressing Alt/Opt, drag the rectangle horizontally and vertically to multiply it as many times as you want. Your pattern is now ready.

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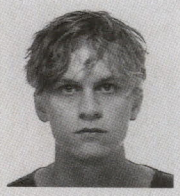
Illustrator CS3 or later

# Master Inner Glow for vector shading

**Siggi Odds** walks through a time-saving technique for adding shadows and highlights to your illustration work

**By shading your illustrations with gradients and effects, rather than tackling it in Photoshop, you retain the full scalability of vectors.** This is particularly important if your images will be used in a broad range of sizes and applications: I've used this particular technique to create images for everything from web banners to large-scale window decorations.

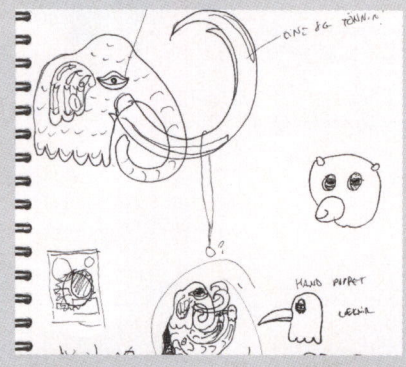
Designers often seem to be afraid of using effects in Illustrator, but I personally find them to be an essential part of my workflow. Here, I'll demonstrate how to use the Inner Glow effect to make odd-shaped gradients, creating some slick shading.



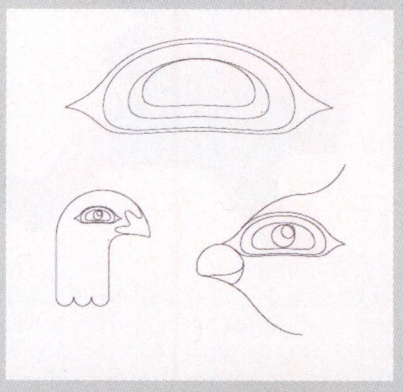
**Siggi Odds**
Siggi Odds is the working moniker of Icelandic graphic designer and illustrator Sigurður Oddsson. From his base in the heart of Reykjavík, he produces work for a broad range of international and local clients. www.siggiodds.com

**Time needed**
5-10 hours

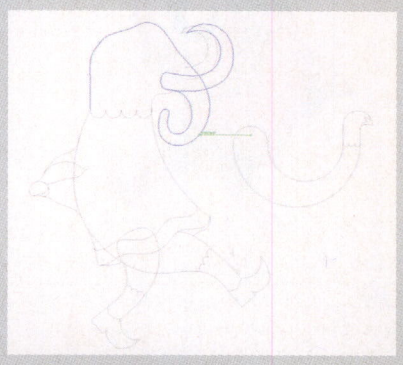
**Skills**
- Define a simple colour palette
- Colour quickly with Live Paint
- Add shading with the Inner Glow effect



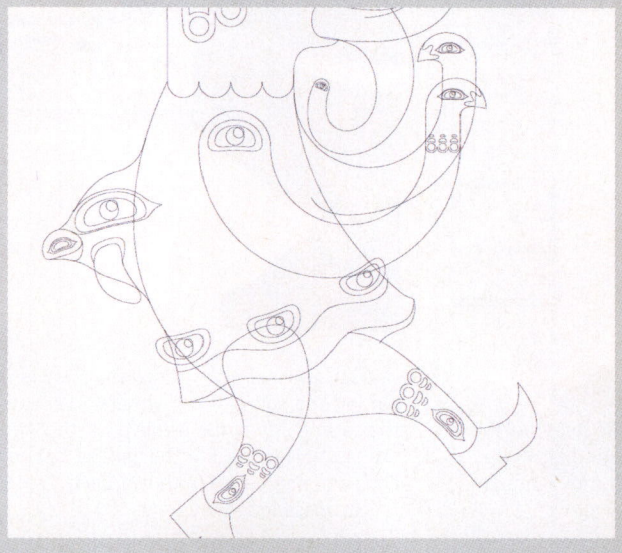
01 Begin by making a very rough sketch on paper of what you're going to draw, gathering references and making a list of everything that you want to have in the illustration.



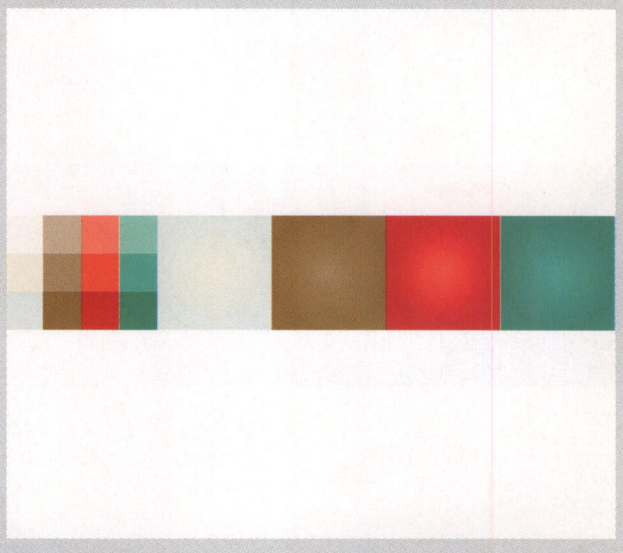
02 Go into Illustrator, select the Pen and Pencil tools, and begin drawing some of the elements of your design with a stroke outline.



03 Now start drawing the main elements of the design, still using the Pen and Pencil tools as well as some geometric elements, and begin to compose the final image.



04 Create a new layer for any finer details, to keep it separate from the basic outline for the time being – this makes it easier to colour the main underlying shapes quickly.



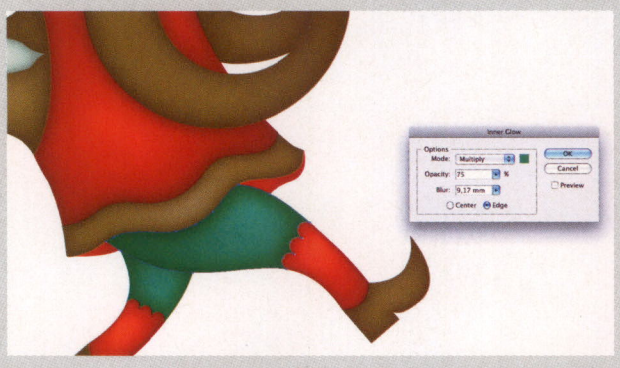
05 Before colouring, make your basic palette. I chose three main colours for this illustration and made shades of those colours, as well as gradients, for later use.

06 Next, hide the detail layer, select the main outline and start colouring the shapes with Live Paint. With the Eyedropper tool, select the gradients and hues from your palette to colour the whole layer.

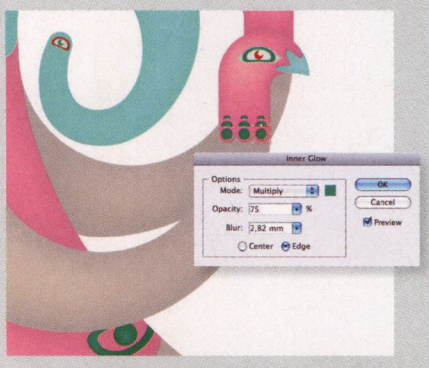
07 After colouring this layer, delete the stroke outlines, expand the Live Paint group and merge/unite the various shapes that need to be combined using the options in the Pathfinder panel.

08 Now make the detail layer visible and repeat step 7 for the main outline layer. Use Live Paint, delete strokes, and expand and merge the shapes as necessary using the Pathfinder panel options. →

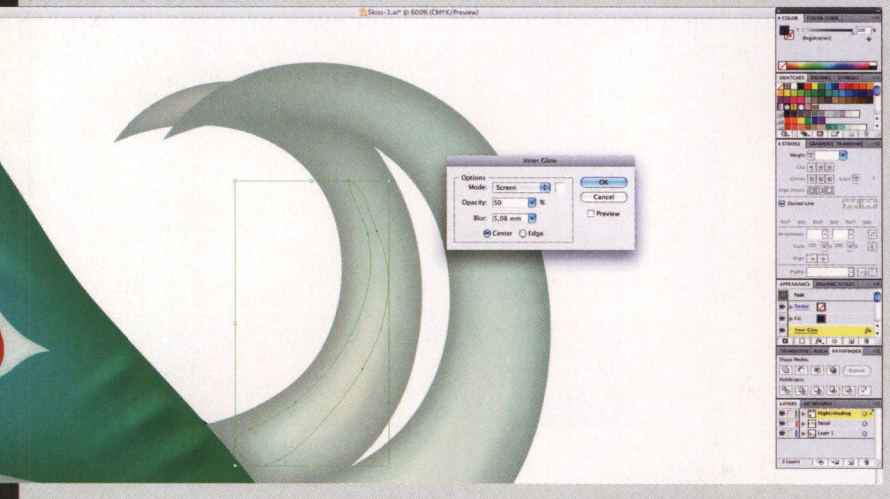
09____At this stage, the basic shape and colouring work is done, although it can always be polished in the later stages. Now it's time to begin to work on the shading.



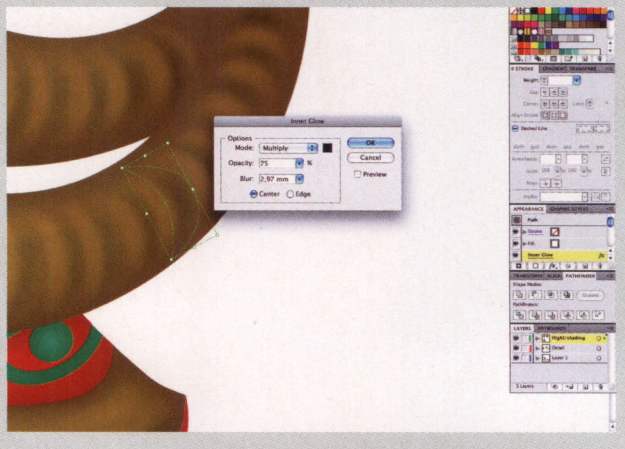
10____Begin shading the basic shape layer and hide the detail layer. Go to Effect>Stylize>Inner Glow for the shading, with Mode set to Multiply and Opacity set to 75%. Choose a darker colour from your original palette as the shading colour. Then adjust the blur until you're satisfied.



11____Repeat this process for all the colours, as well as in the detail layer, until all the coloured shapes that you want to be shaded have been treated with the Inner Glow effect.

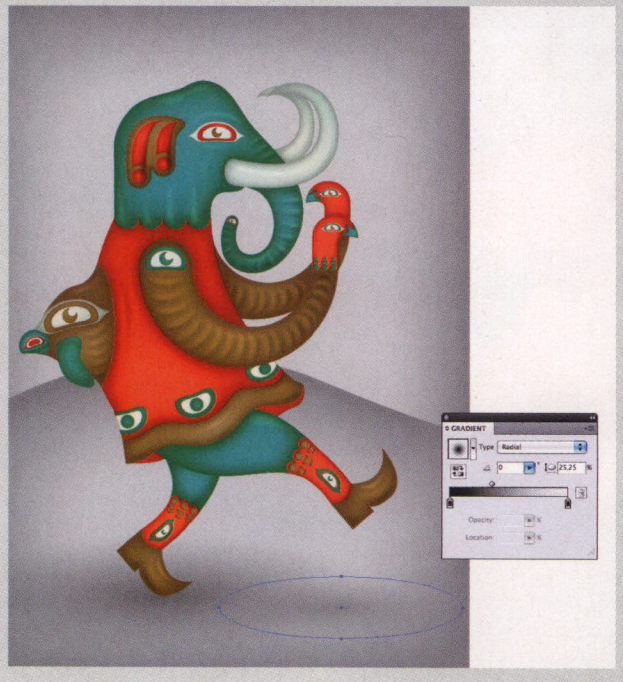


12____Now create a new layer for highlights and shading. For highlights, draw the shapes with the Pencil tool and colour them. Then select the Screen Blending mode for the white Inner Glow from the centre, and adjust the Blur level until the highlight looks smooth.



13____For shading, draw the shapes the same way as earlier, and colour them white. Add a black Inner Glow from the centre, adjust the levels until it looks right, and then select the Multiply mode. For the highlights and shading it can help to copy and paste a lot of the shapes, so you don't have to repeat this process too many times.

14____After a good session of drawing, copying and pasting the shading and highlights, the image is almost complete. Make any minor adjustments to colour and polish the details. Now all it needs is a subtle background.



15____For the background, use the Inner Glow effect with a mid-range grey. Here, I've drawn a subtle landscape to give a sense of space, and added some shadow with a radial gradient multiplied on the background.

Image from *Creating a Stylized Pin Up Cover Design in Photoshop CS5*

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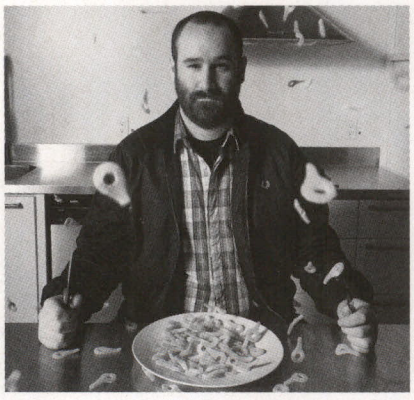
# Jared Nickerson

## The illustrator and BloodSweatVector co-founder discusses blending the cute with the grotesque, and why he's most at home working with characters



**Jared Nickerson**
The Seattle-based illustrator operates under his Jthree Concepts studio name, working on a wide range of projects for clients including Nike, Adidas and Coca-Cola. He's also the co-founder of the BloodSweatVector online community.
www.jthreeconcepts.com

**"It's definitely become more of a staple of my work: the cute stuff but with an aggressive, almost evil, twist on things," says Jared Nickerson of his often frantic, densely detailed character pieces.** "I think it's just turned out that way. I've always liked that mix throughout all forms of arts, like my birds that aren't always happy, mushroom characters with weapons, or milk cartons with vampire fangs – random stuff, really."

The Canadian illustrator is now ensconced in Seattle. Working entirely with vectors, Nickerson is synonymous with a clean, crisp character style mixing pop culture references with a darker, more surreal tone, à la Robert Crumb. His style can be clearly seen in Funchat, an app project for social mobile entertainment company Funmobility that saw Nickerson teaming up with illustrator Dacosta Bailey to create a series of 30 characters to be used as avatars – each with five emotional states – along with the supporting user-interface graphics, including buttons, chat categories and the typically bustling, anarchic backgrounds for which Nickerson is known.

"The most important part of the project was the creation of the 30 characters, so we sat down and tried to get a solid style throughout for each character, and then transition this style to all the supporting UI elements," he says. Working in Illustrator, the pair used everything from the Pencil tool for quick sketching and the Pen tool for precise linework to transparencies and gradients for shading, and the Pathfinder to combine shapes for uniform colouring.

"I don't typically use gradients for shading," he admits, "but we used a slight gradient in almost every single one of the characters' faces to give them universal lighting. This was done by putting the gradient type on radial and adding a white or similar light colour in the upper-left of the head to create a sphere lighting effect."

Nickerson's distinctive character style has developed over his years as a full time freelancer. His earlier aesthetic, he says, was much more minimal, with simplistic lines, before he adopted a more portrait-like approach. "Then in the last few years I got into my own sort of character style, and I've stuck with that. I enjoy them, and they seem to be popular." →

01

**01** Jared Nickerson's outlined **Last Vampire Astronaut** character is typical of his style, featuring various repeated objects, such as crystals and glass-bottled brains

**02** Nickerson worked with illustrator Dacosta Bailey to create 30 characters, with **five emotional states**, to be used as avatars for Funmobility's Funchat entertainment app

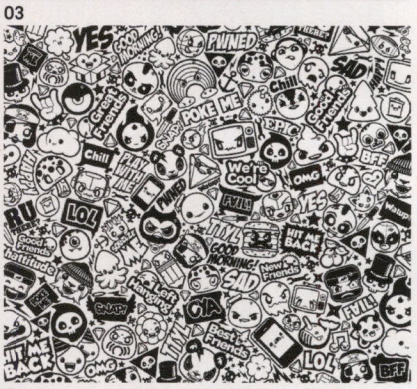
**03-04** "The hurdle in this project was coming up with and then fleshing out the **30 characters**, their personalities and also their general look," says Nickerson

**05** A **slight gradient** was used on almost every single one of the characters' faces to give them a universal lighting

**06** Nickerson's 'For The Love' illustration is available as a wallpaper and also comes as an **iPhone case**

02

03

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→ Regardless of subject matter or client, nearly all of his images intriguingly blend the cute with the grotesque. Mini-characters that at first appear happy are, on closer inspection, wielding weapons, while sad birds sit atop text such as 'Humanity has raped my soul.' Far from pretentious, this sort of incongruity is darkly amusing.

While it's no surprise that clients such as Adidas and Nike would gravitate towards Nickerson's style, he has also attracted more traditionally corporate companies, such as Microsoft. He sees no real difference – at least when it comes to his artistic approach. "A lot of my larger clients lately have come from Behance, such as Microsoft and Nike, and I guess they see something in my work they like. Who knows what they think? Then at the other end of the spectrum are people like Suicide Girls and Headwear, so it varies."

Adidas is one of Nickerson's many repeat clients. Having designed the original Adidas Neo robot branding back in 2010, he was approached in 2011 to rebrand the character for a new target market. "The initial idea was to have a square-headed robot that the client already had some branding based around, but that needed to be fleshed out a little more. The deadline was incredibly short, so I tried to keep things simple," he explains. "I started by referencing other simplistic robots and I tried to work the idea of a robot in an Adidas jumpsuit. I tried various faces and accessories until I found a look they were happy with," he continues.

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Sometimes a client simply wants to use his existing images, as did DandyFrog, a French company that produces customised umbrellas. They wanted his personal piece Psychedelic Apples of Death, a typical pattern with the pithy phrase: 'Fuck your sneakers'. "That's not unusual," he says. "When I do personal work it often ends up paying off anyway, because it often features in client work – or part of it does anyway, as happened with P.A.D."

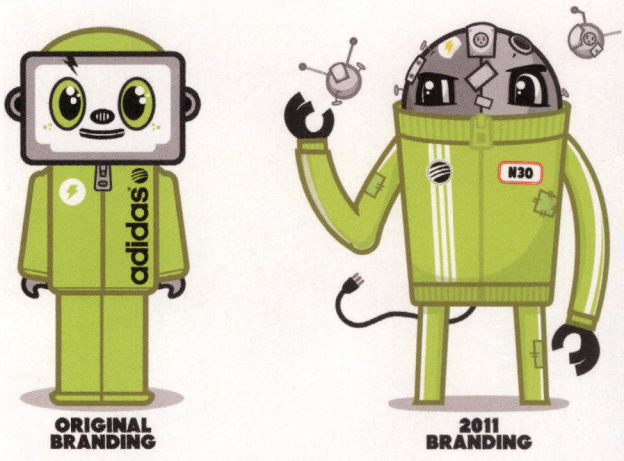
This ability to re-use elements of patterns easily is an advantage of working in vector illustration, he says. "It's different to other digital media though because they're just shapes – you're not drawing. So you have to approach the medium differently; it's more about organising than doing brushstrokes, and you have to gear your mind differently."

Nowadays he tends to begin a project by going straight to the keyboard. "Most people start by sketching things out, but over the years I've eliminated that extra step. In some cases I wish I still did sketch ahead of time, just for planning reasons, but overall it's fine – I'll doodle instead." He's also switched from a tablet to drawing everything with a mouse and the Pen tool. "It's probably my most-used tool in Illustrator," he reveals. "Also, people are surprised I don't use layers in my work – it's all on the one layer and the individual characters are grouped objects."

He isn't afraid to venture into less familiar territory, either. "I was commissioned by anime music festival Atomic Lollipop to create a logo, mascot, supporting characters and graphics for the event. The client was incredibly specific on →

**07-08** Adidas Neo. "I tried to work the idea of a **robot in a classic Adidas jumpsuit** so it would be immediately recognisable as a robot, but also an Adidas product," he says

**09-10** Geomagnetic Cosmic X-Ray Specs; and a **T-shirt design for Nike Air**, part of an ongoing series of projects with the global sports brand

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→ what they wanted to see, and the idea was based on classic anime," he recalls. "I rarely, if ever, work with anime characters, so getting the look and feel just right – not only with the core character, but also the supporting elements – took a bit of work. Because of the various different aspects – character design, typography, arrangement, print prep and so on – I utilised almost every Illustrator tool that I know for this project."

As well as illustrating, Nickerson also co-founded BloodSweatVector with Brad Mahaffey, for vector artists to share work, gain feedback, and be inspired. "We wanted a place for artists we liked to post work and get feedback – it's important to have people you respect commenting on your work. It's invite-only, so if an artist wants to join we see if their work is in the style we like. We'll launch a resource section soon, where you can purchase wallpapers, vectors and so on."

And what of the future for himself? It looks as though Nickerson will be busy: "I have a few music releases coming up that I'll be doing the artwork for," he smiles. "In addition, I have the regular client work, including more Adidas Neo branding, work for record labels, other various design projects, and all the core branding and design work for Coca-Cola's official sponsorship of the Euro Cup 2012."

**11** Despite rarely working on **anime-style characters**, Nickerson rose to the challenge and created this bold character for the Atomic Lollipop festival

11

## Nickerson's tips for better illustration

### 1 Master the Pathfinder tool

"The Pathfinder is absolutely great for solidifying shapes or elements together. Holding Atl/Opt while selecting the Pathfinder tool and then hitting Expand will make the effect permanent, which can be handy for saving memory – but only ever use this if you don't need to separate the shapes later."

### 2 Pen-point accuracy

"The Pen tool has been great to me over the years, and still remains my number one tool. The precision that it gives you is incredible – for even more accuracy, always remember to have 'Snap to Point' enabled (View>Snap to Point)."

### 3 Know where your files are

"Naming your files properly by date and within a specific client folder can save lots of time later down the road. I find that being specific with filenames helps me find different elements easily."

### 4 Create your own swatch set

"This can be a lot of work, depending on how many swatches you add. But whether it be using existing Pantone colours or you're creating your own, it's handy to have these on screen at all times for quick selection and reference. They're even good for visually planning out a piece. I have a specific collection of swatches that I just use for outlines and strokes, so I can visualise how different colours will look on a specific design."

### 5 Don't be afraid to experiment

"If you don't know what a tool is, then select it and start playing. Try exploring menus to see what things do. I find that this is the best way to discover new techniques and methods for creating a specific effect or result."

# LOGO DESIGN TOP 50

Take control of your identity projects with 50 expert ways to create better logos in Illustrator

## 1 Use Select>Same

Quickly modify the colour of multiple shapes with the same fill or stroke by using the Select>Same options. These come in handy when you need to match a colour to a Pantone swatch, or experiment with different colourways. Go to Select>Same and you can select all shapes with the same fill colour or stroke colour.

## 2 Edit in the Layers palette

Grouping layers makes life a lot easier when working on a complex design, but regrouping and reorganising the groups to get access to the right path can be a pain. Remember, then, that you can select and edit individual paths or shapes in the Layers palette. Click on the circle icon in the path sublayer, and you'll be able to identify and edit the path more easily. Hold Shift to select multiple paths this way.

## 3 Lock layers

Stacking shapes and paths upon each other is all too easy, but can make selecting paths at different depths difficult later on. If you're working on a complex logo with many layers, lock the shapes you know you won't need to edit. Hit Ctrl/Cmd+2 and lock the layer in place. Then, whenever you want to select a layer beneath or above, Illustrator will bypass the locked layer.

## 4 Customise your interface

Illustrator CS4 and CS5 each have editable interface set ups. With this in mind, it's a good idea to try and identify the tools and processes you most rely on, and undock these from the Tools palette. For instance, if a tool naturally resides as a sub menu within another tool, click and hold on it, then move it to detach it from the main palette to somewhere more convenient on your interface.

## 5 Have multiple workspaces

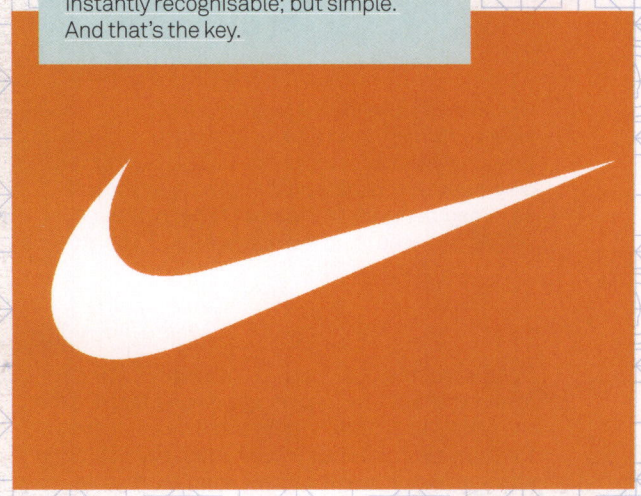
Whether you detach tools, prefer certain palettes open, collapsed or not present on your interface at all, Illustrator CS4 and CS5 let you save your preferred workspaces. Try setting up two or three for particular functions – for instance, an uncluttered space for ideas and sketches, an editing option and a general option, then flick between each for specific tasks. This is often faster than reorganising palettes on the fly.

## 6 Edit without redrawing

A basic function that's often overlooked is Illustrator CS4 and CS5's ability to edit points on a path without worrying about disrupting the anchor point – a godsend for quick edits to shapes without having to redraw or reposition them. With the Direct Selection tool, click on a line segment between two points on a path and you can drag its Bezier curve without moving the anchor points.

## 7 KEEP IT SIMPLE

The best logos are the ones that are recognised in varying sizes and with elements of the design covered. Just think of the first half of Nike's tick, or Google's colours, for example – instantly recognisable; but simple. And that's the key.



### 8 Group objects

If you regularly create new objects by grouping two or more existing objects, remember that these inherit the editable parameters of the individual shapes, so you can directly control their sub-layer order. So, rather than merging this collection of objects into a single object, group them. The sub layers (or original objects) can then be reordered with Ctrl/Cmd+[ or ].

### 9 Align in one go

The Align palette is more precise than relying on guides and the snap-to rules. When drawing, ignore grids and absolute alignments, and concentrate on your creation. Later in the process, open your Align palette and snap the elements you need to align into place in a single process.

### 10 Keep clipping masks on top

Always ensure your clipping masks are the top layer of a group, and that the group is on top of your layers. This way, Illustrator will use less memory to create the clipping path, making it less prone to annoying crashes.

### 11 Make swatch libraries

Swatch library creation is one of those things we all mean to do but never quite remember to do in practice. Well, the pros far outweigh the cons here, as Illustrator allots memory space to imported swatches. By creating and saving swatch libraries, Illustrator loads them upon start-up, freeing memory and speeding up application of the swatch as and when you need it.

### 12 Remember the Actions panel

Illustrator has its own version of Photoshop's Actions panel. The actions are recordable, editable and saveable, and in the same way can shave precious time from a project and make repetitive tasks simple.

### 13 Create new actions

In the Actions panel, you'll find predefined actions including common edits like opacity drops, Unite, Shear and Rotate commands. You can create a new action by hitting New Set, naming the action, then hitting record and carrying out the task.

## 14 MAKE THEM STAND OUT

When was the last time you saw a logo surrounded by nothing but pure white? Logos are rarely viewed in isolation, and by their very nature should compete for attention. Mimic this by creating a background layer of general screengrabs, bits of text, colours and random shapes. Does your logo still stand out? Does the surrounding visual noise bury your design?

## 15 Enable Button Mode

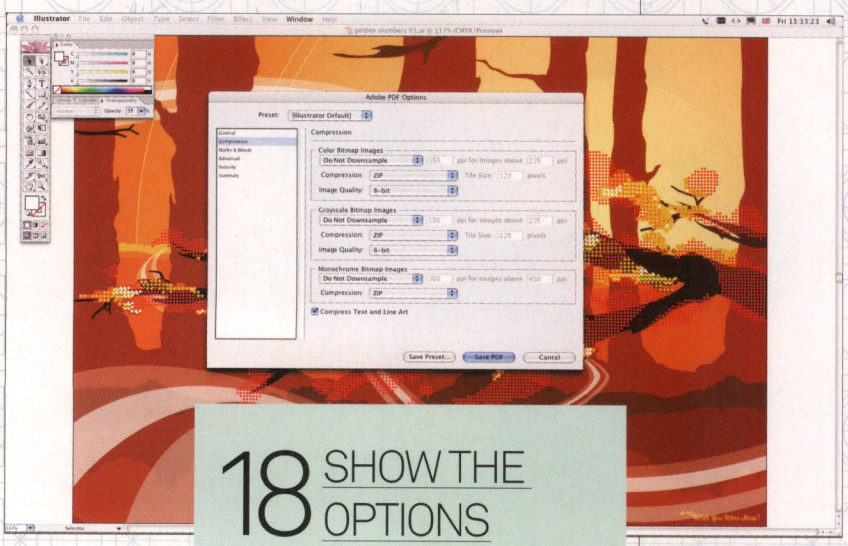
Following on from Actions is Button Mode. This lets you map particular actions across keyboard shortcuts, and can be a huge productivity booster, for instance when selecting and filling colours or saving out a design in a different format. To enable Button Mode, go to the Actions panel, double-click on an action, and select which keyboard key to map the action to.

## 16 Join paths

Learning keyboard shortcuts and Button Mode shortcuts is a huge productivity booster, but one that always sneaks under the radar is the functionality to join two end points. Using the Direct Selection tool, select the end points of the path(s) you want to join, and hit Ctrl/Cmd+J. For logo work in particular, and especially when customising type paths, you'll find that this a lifesaver.

## 17 Function key short-cuts

You can also map actions to Fn key commands and then run them in combination – though remember your OS may default particular system commands to Fn keys, so ensure these are switched off. Some ideas for Fn key actions are: Place (a photo, logo or template for instance); Add Crop Marks; Hide/Show Artboard; Hide/Show Page Tiling.




## 18 SHOW THE OPTIONS

Designing a logo or brand guidelines for a client is a two way process. Your client will have expectations and ideas, some of which you might not agree with. This is where Illustrator's multiple artboards come in handy, letting you show the design differences between their ideas and yours. Use the Artboard tool to crop out designs to the client's suggestions and your own, then export directly to PDF. You can then send your client multiple versions.

## 19 Remember the Appearance panel

When experimenting with filters and effects in your logo design, don't fall into the trap of trying something, deciding against it, and then hitting undo and starting afresh. Instead, make the most of the Appearance panel, where non-destructive parameters of any applied effect or filter reside. You can then adjust the effect options and parameters or turn them off altogether to check before and after.

## 20 Quick duplication

Duplicate shapes in your logo design across the same layer by holding down Alt/Opt, clicking on a shape and dragging the duplicated shape into place. This will only create a duplicate on the same layer though, so remember to move the new shape to a new layer should you need to apply separate edits, filters or fills.

## 21 Experiment with glyphs

Don't forget the Glyphs panel – it's a great source of inspiring shapes for logo design in Illustrator. Explore the panel in a little more detail, and try out some of the more abstract shapes as starting points for new shapes. You can use the Preview area to text out different glyphs from different typefaces.

## 22 Use the Pathfinder tool

The Pathfinder tool is one of the most used and most powerful of Illustrator's general features. Using it, you can combine, subtract and create multiple shapes from existing forms – all great for designing logos. Remember though that you should always try and eliminate grouped paths rather than using the Pathfinder tool, as this makes your logo design easier to work with and keeps file size down.

## 23 Begin at the beginning

This means having a thorough brainstorm of the idea, creating mood boards and shape references, and narrowing the parameters of the project – from colours and form, to type. You can do this in Illustrator, of course, and it's work keeping a rough file with multiple artboards as a reference. When you do begin working on the design, keep the ideas file open as a separate tab for quick referencing.

## 24 Know the brief

Research the end requirements of your logo design, and get a firm understanding of how and where it will ultimately be used. For example, think about digital-only designs, and what colours work well for the brand in an RGB colour space. Similarly, if the intended use is across multiple media, think about sizing, legibility and any elements of branding that can be removed or added for different outputs.

## 25 TEST SIZES

If you are working on branding that's to be used in varying sizes, then do make sure you test it properly. In Illustrator, print the logo out in different sizes, from as big to as small as your printer can handle. Pin each against the wall and check for elements that are either too overbearing when printed large, or lost when printed small. You often find some parts of a logo become distracting at different sizes.

## 26 More on multiple artboards

Illustrator's multiple artboards are a great place to generate ideas, then discard them. You can open new artboards, and compare and contrast several themes. Try not to restrict yourself to a single canvas: set up between three and five artboards, jumping between each and trying new ideas out. When you're done, zoom out and view all your artboards to see what's working and what's not.

## 27 Compare different colourways...

By using multiple artboards in conjunction with the Appearance panel, you can quickly apply different colourways to different starting designs. This manner of working comes highly recommended, as it separates the form and colouring elements of a successful branding project into two distinct tasks. You may well find different colourways work better with different design forms, and this can help narrow your options.

## 28 ...and test them out

Your client might stipulate colours, but if not, come up with an alternative colourway – a home and away strip if you like. Sometimes simply reversing colours means your client has two branding options for the price of one. Always print these options out, though, especially if they're destined to be used in print.

## 29 Don't be too literal

The lure in logo design, especially when working in a vector program like Illustrator, is to use illustrative elements instead of words. Thus a restaurant logo has to show some kind of food, estate agents' logos show houses, and bookshop brands show books. Yet the most recognisable brands in the world are often arbitrary to their brand's output – just because an object has relevancy doesn't mean it's necessary.

## 30 Remove elements

Not every logo design requires a symbol, flash or representational shape. For many clients, a masthead that incorporates legibility and a sense of uniqueness tied in with a clear, well-selected colour palette will suffice. In Illustrator, experiment with removing elements from a near-finished design. Knock out anything that interrupts the core branding – these elements may have helped in the logo's creation, but they can sometimes free up more space and yield a 'cleaner' design once gone.

## 31 Separate files

If you're working on a multiple output campaign – for instance a piece of web branding, a print design and more – break each element down into separate tasks. Allot each task its own individual project file. Then use Illustrator's File Viewer, in conjunction with Bridge, to check how each element fits the overarching project guidelines. Do they all feel part of the same brand? Do they each work separately and in unison?

## 32 START OUT IN BLACK AND WHITE

This doesn't mean setting up a project in Greyscale; just being selective with your initial line work. By approaching colouring sections as a separate stage you'll be able to select a colourway independently of the design considerations. This in turn will enable you to be more experimental in the colouring stage, and decide which colours work best with which objects.

## 33 REMEMBER THE EYEDROPPER TOOL

It might seem like a basic implement given the range of tools Illustrator has, but the Eyedropper tool sits on the Tools palette for a reason – everyone uses it. Not only does the Eyedropper enable you to quickly match colours of logo elements, but it will also apply similar effects, gradients, fills and even match type and casing for you.

## 34 Stick to the boundaries

The Artboard tool's rulers can be useful for checking dimensions or setting viewing guidelines. Your brief might specify a white space bleed of 3mm all around, for example. By setting up guides using the Artboard tool you can make sure you don't stray over these boundaries while designing the logo (and then realising that you need to resize elements later down the line).

## 35 Simplicity is key

Simple, clean logos work just as well on billboard signs as they do when used at one-inch wide. By focusing your initial ideas on the simplest mechanism for transmitting the brand identity – a flash, straight typography, shape, form, repetition or pattern, for instance – you can then bring in detail and colour at later design stages.

## 36 Make a new library

One a job's signed off, think about some of the elements, gradients, shapes or colourways you've used and compile a library for future logo projects or amends to the brief. Save any custom brushes, colour palettes, symbols or objects. You'll find that having the core elements of your style on hand within Illustrator's library will speed up your future projects no end.

## 37 Edit from one panel

Another new function found within Illustrator CS5's Appearance palette is the ability to edit multiple stroke weights, effects and fills from one panel of options. Always ensure the Preview box is checked when you're working at this stage and keep any effects layers well organised – this will help you clean up the work in the final stages.

## 38 Explore the Layers palette

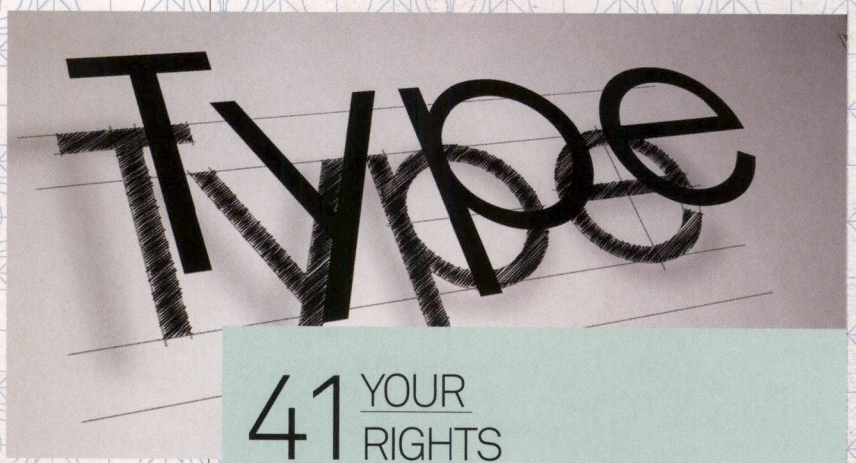
The Layers palette has become vastly more important to Illustrator in recent releases and now packs a few hidden productivity enhancements. For example, the ability to release items to separate layers is great for experimenting with the positioning of different text characters and effects; and the Target column enables you to turn effects options on and off quickly to gauge how effective each edit has been.

## 39 Isolation mode

Introduced in Illustrator CS3, this is a great alternative to constantly ungrouping items, or repeatedly locking and unlocking objects or layers. It can be a godsend when you're working on complex artworks and dealing with lots of grouped objects. Simply select a layer or sublayer in the Layers panel, and choose Enter Isolation Mode from the Layers panel menu.

## 40 Scaling strokes

Illustrator's default settings prevent you from scaling the stroke of an object at the same time as the actual object itself, and it can prove time-consuming to correct the attributes of many objects individually. To counter this, convert your strokes to outlines or, if you want them to remain editable, select 'Scale Strokes & Effects' from the Transform palette's drop-down menu.

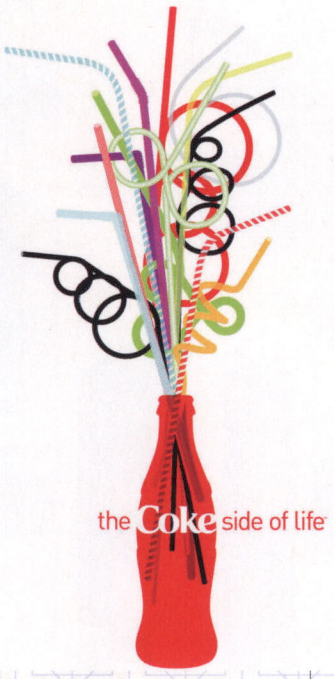



## 41 YOUR RIGHTS

Ensure the brief you receive from your client makes absolutely clear what future uses the logo may have, as well as its immediate use. For example, do they plan on animating it at any point (such as the example above), or using it on smaller branding objects? If so, it might be worthwhile suggesting a series of branded elements that can produce the same result in different mediums.

# 42 CREATE BRAND GUIDELINES

Text-based logos have the potential to create more questions than they answer. For example, should the text be flushed left or right? Should it ever be used with surrounding text? Test this in Illustrator and create some branding guidelines to supply your client with. They can be very simple – such as: "Always ensure a 3mm white space between logo and text" – but they will help get the best out of your logo design.




## 43 Third dimension

Illustrator CS4 and CS5 each pack a mean punch when it comes to working in 3D. And while they are no match for a bespoke 3D package, if you are selective with your preferences, these tools might be of use. The 3D Rotate tool, for example, makes giving your drawn objects depth and perspective a breeze, and can often really help 'lift' a logo from the page.

## 44 Kern manually

Illustrator has several in-built settings and parameters for working with type that are often overlooked. For logo design especially, these can be a great help, and you should spend some time familiarising yourself with Illustrator's tracking functions. For logo design, working with manual kerning is highly recommended, as it enables you to craft custom glyphs and overlaid type without fracturing the rest of the word.

## 45 Save styles

Illustrator's Character Styles palette enables you to set and style passages of text without having to individually style each section. To set a style, type your heading or paragraph using the font styles you want to save. Then go to Window>Type>Character Styles. In the upper-right corner will be a small arrow, which is the Styles menu. To create your own name for the style, choose New Character, or Paragraph Style, then type a name and click OK.

## 46 Type on a Path

The Type on Path options introduce a few new settings to CS5 that enable you to quickly move type around a path. You can move passages of type to sit underneath a path by dragging the centre line to the opposite side of the path. You can also go to Type>Type on a Path> Type on a Path Options. In the box that appears, check the Flip box and click OK.

## 47 Get the type right

Make sure you learn the differences between point type and area type. Point type, created by selecting the Type tool, is so-called because it adds text to a certain point in an image. Area type, created by selecting the Area Type tool, adds text to fill a specified area of an image. In logo design you may often find creative solutions to restrictive spaces by applying type to areas rather than across a path.

## 48 Move the baseline

Type on a path can end up looking quite boxy at times, especially if a logo just states a single word. If you find a project doing so, adjust the baseline of the text so the path goes through the x-height as opposed to the baseline. You can also change the rotation of individual letters to fine-tune how the text fits to the path.

## 49 Create a trap

Illustrator has various trap commands that you should make good use of when sending your final logo design to print. The first of these is available through Window> Pathfinder>Trap – this will calculate ink densities and create an appropriate trap, but you can edit the settings and even reverse the trap if you feel the auto trap isn't quite right. You can also apply a trap as an effect, by selecting Effects>Pathfinder>Trap.

## 50 Keyboard shortcuts

Often you'll find the need to edit an object with both a fill and a stroke colour applied to them. When experimenting with a logo, you'll want to quickly swap, edit or remove colours or strokes, and it can be quite time-consuming to manually select and edit each. A fast way to switch the stroke and fill colour is by selecting the object and pressing Shift+X. If you then want to get rid of one of them, all that you have to do is hit the / key.

Thanks to... Ben The Illustrator, Simeon Elson, Bill Gardner, Alex Haigh, Chris Johnson-Standley, Tom Lane, Radim Malinic, Tim Miness and Steve Wilson

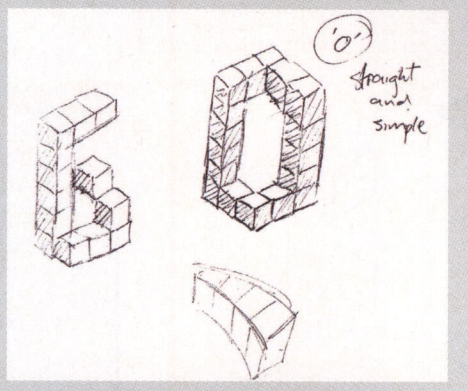
HOMES
OF THE
FUTURE

Illustrator CS3 or later

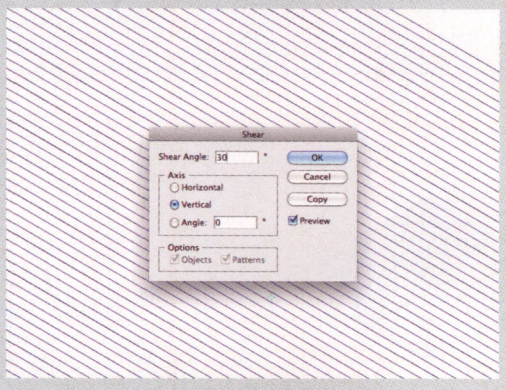
# Create isometric grid-based 3D lettering

**Steven Bonner** shows you the possibilities of an isometric grid by creating a custom 3D typeface

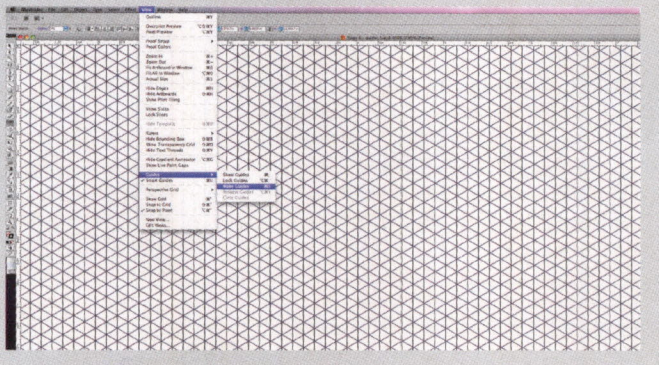
**Isometric-based letters are the perfect way to reflect structure in a display typeface, as I discovered with a recent commission for a magazine feature on contemporary architecture.** Taking the concept further, in this tutorial I'll guide you through the process of building a grid that will form the basis of your design, then show you how to draw, colour and light your letters to create a three-dimensional architectural scene. Once you understand the basics of this technique, you can use it to quickly and easily create standalone pieces or intricate repeating patterns.



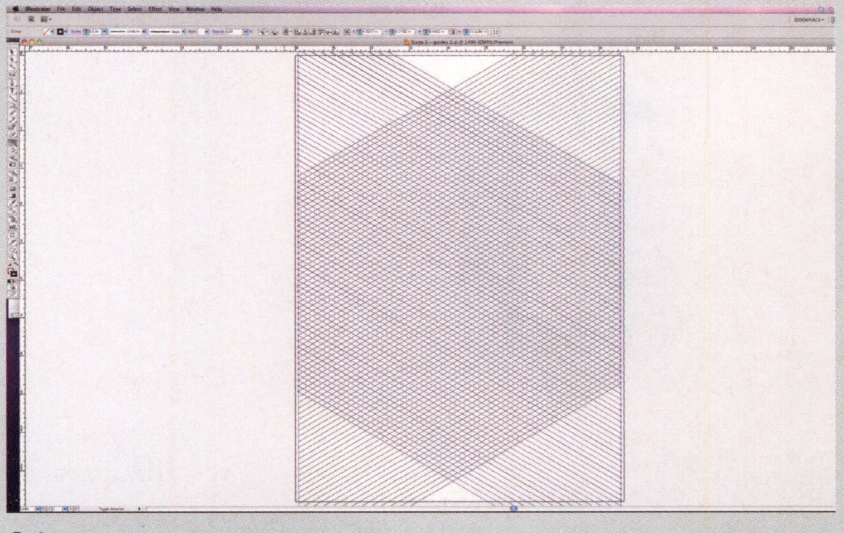

01 ___ Don't dive straight into Illustrator for this. Working on an isometric grid demands precision, but you'll get a better feel for what you want to achieve much faster by sketching a few ideas out onto paper with a pencil. When we reach the steps of making your own typeface on screen, I'll show the full process on one letter only, as it's much better to experiment and come up with your own type designs.




02 ___ There are lots of ways to make your isometric grid, all of which have their own benefits. But for me, this is the simplest method: firstly, using the Line tool in Illustrator, draw a horizontal line across your page and duplicate it several times until you have a good number of lines. Now select all and double-click on the Shear icon in the Toolbox panel. Enter an angle of 30 degrees and click on the vertical axis.



03 ___ Next, copy and paste a duplicate in front (Ctrl/Cmd+F) and select the Reflect tool. Hold Shift to constrain the result and then use your mouse to flip the sheared lines.

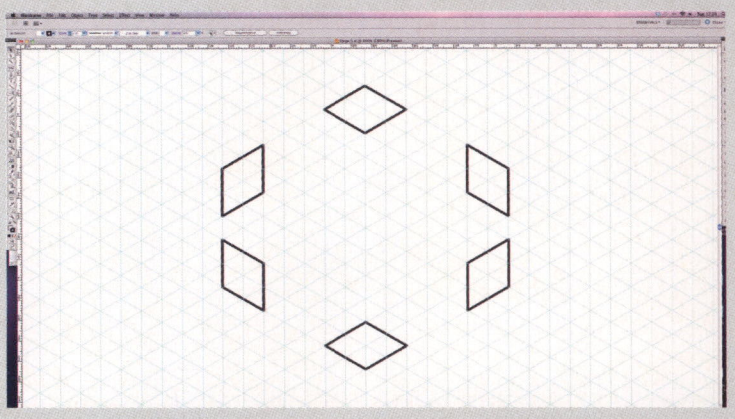


04 ___ Now draw a set of vertical lines through each intersection until you end up with the pattern shown above. A quick way is to draw a line at either end and use the Blend tool to fill the steps in-between. Once you have your grid drawn in lines, select everything and convert all the lines to guides (Ctrl/Cmd+5) to create your finished grid. →

**Steven Bonner**
___ Stirling-based Steven is a multi-disciplined designer and illustrator, working for clients such as Harper Collins, Cadbury and Diesel. His love of type is clear throughout his portfolio. www.stevenbonner.com

**Time needed**
2-3 hours

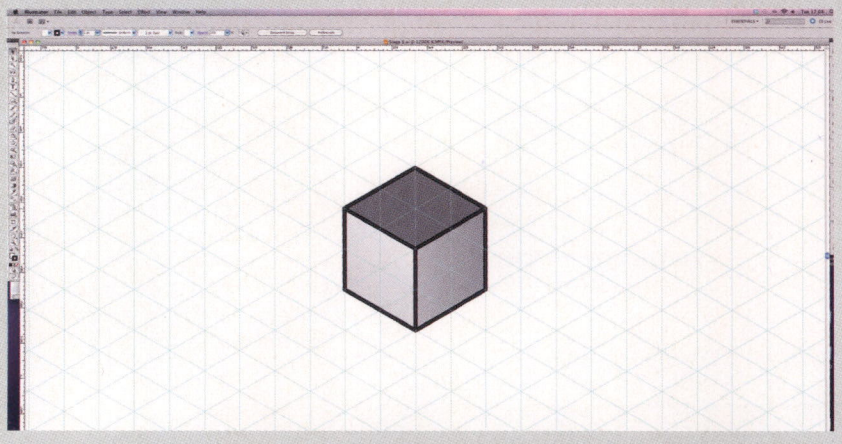
**Skills**
___ Create an isometric grid
___ Identify a light source to help create a 3D effect
___ Use colour and transparency to show depth



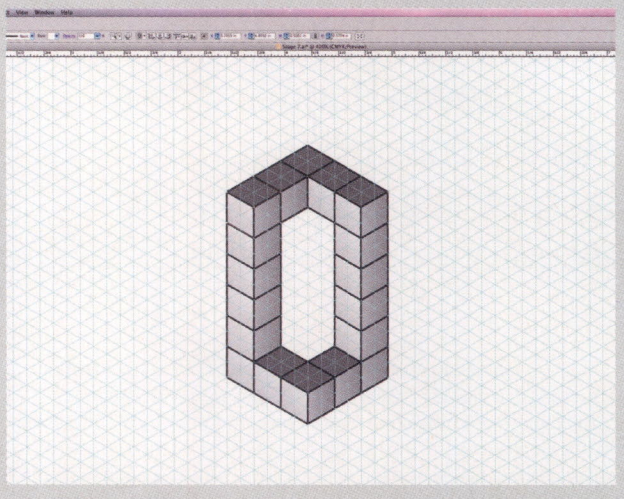
05 ___ If you haven't already, switch on Smart Guides (Ctrl/Cmd+U) and enable Snap to Point (Ctrl/Cmd+Alt/Opt+") to help you get precise positioning. To create the letters here, we'll construct a series of cubes along our 30-degree lines. Draw each side of a cube separately, working without fills at this stage.

### Use Smart Guides

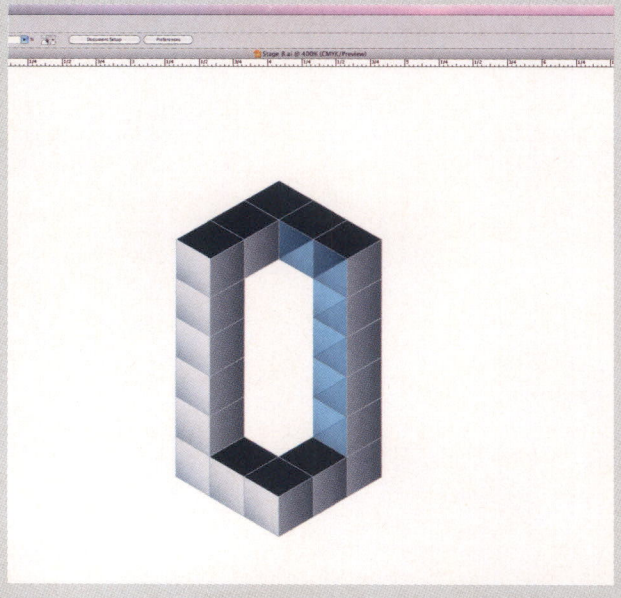
Make sure you always switch Smart Guides on when doing work that needs precision positioning. They might seem a little annoying at first, but you'll find they really speed up your workflow.



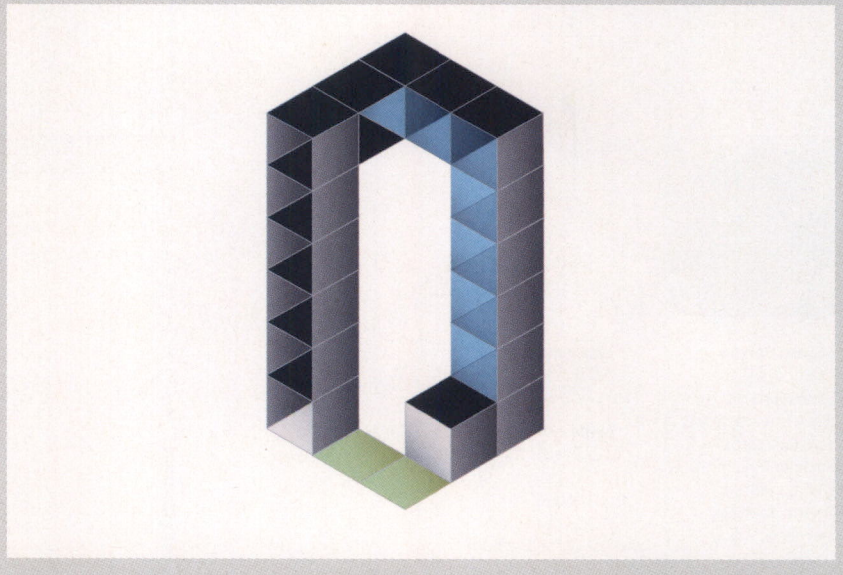
06 ___ Once you've drawn each side, put them together to build your first cube. Make sure you include the hidden faces, as you might want to reveal and use them later, depending on how you want your letters to look. At this point, it's worth adding some basic shading to define a light source. I've chosen to have my light source coming in from the bottom left-hand side so that my top plane is dark, the right plane has a medium gradient and the left plane is fairly light.



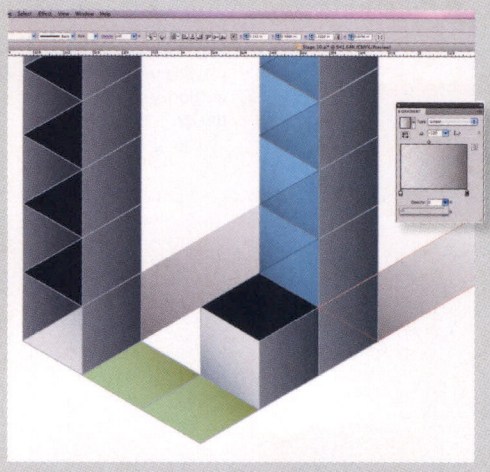
07 ___ Start to build your first letter by duplicating your cubes and repositioning them. This is where Smart Guides and Snap to Point will come in handy. You'll see that having a defined light source now helps in visualising the letters more clearly.



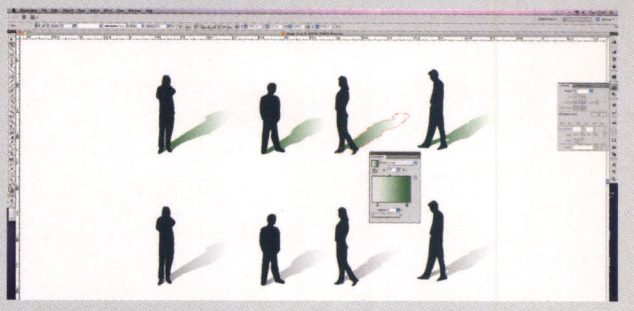
08 ___ Once you're happy with the shape of the letter, start adding in some more advanced colour. As we're not looking for perfect realism here, you can break the rules a little for aesthetic effect. For example, I've kept a medium-to-light gradient on each cube for interest, despite the fact that in reality there would only be one gradient on the whole face.



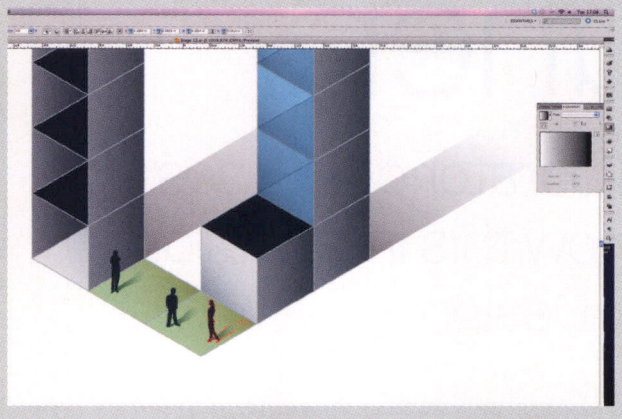
09 ___ Now make the letters more building-like. Start by removing some of the front faces to reveal what's behind. Colour these back faces a slightly darker shade for more depth. You can also add a blue gradient and play with opacity in the Transparency palette to create windows, and add a green gradient on the bottom planes to create grassy areas. Feel free to experiment with colours and textures to create soil, paving, monoblocking and anything else you can think of. I stuck with flat colour for my grass, but you could add some texture through Film Grain, for example.



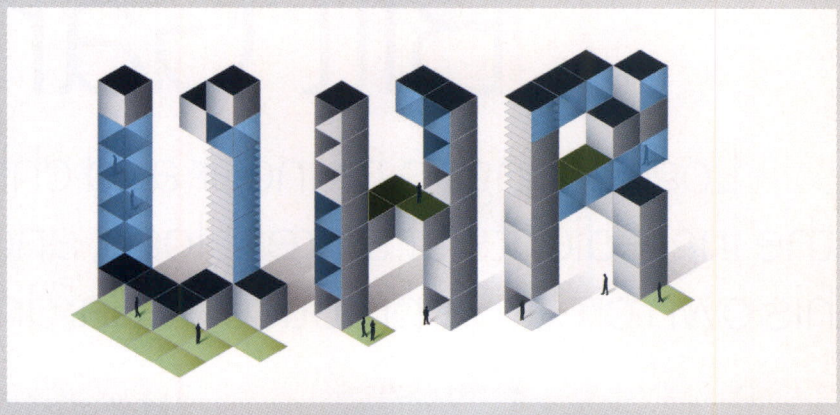
10 ___ Once you've finished your base letter, draw in some shadows along the 30-degree grid, to indicate height in the structures. When you draw shadows, use opacity to represent a fade rather than simply fading to white. You'll gain a more natural look as well as the ability to add background colours underneath without any problems. Also remember that shadows aren't black – they're darker shades of the colour they're cast on. So if you have a shadow casting on grass, for example, it should be dark green to clear instead of black to white.



11 ___ To give the letters some scale, we need to add another recognisable element. In this case, since we're working with buildings, it makes sense to add people into the scene. Draw some rough silhouettes and matching shadows, again on the 30-degree grid lines.

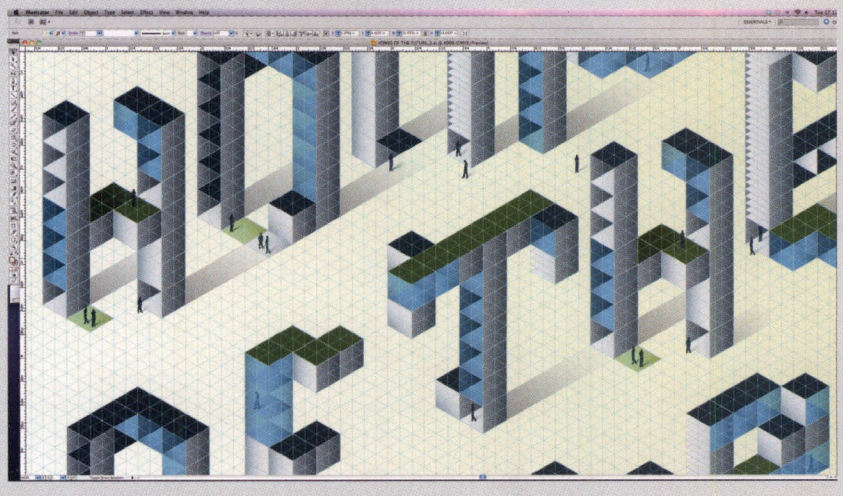


12 ___ Once you have a small selection of figures, begin adding them into your scene. Again, make sure your shadow colouring matches, and try to place the shadows in positions that will add interest, such as inside windows and in alcoves.



13 ___ Carry on as you did before and start to draw the other letters. Look for interesting compositions and see if there are different ways of rendering the same letter for variation. You might also want to add a large lawn, for example, and as long as it doesn't hinder readability too much, go ahead.

14 ___ Once you've drawn all the letters you need, place them into the words you're going to illustrate and see how they look together. This is the point where you might spot that one of the letters doesn't quite work in the sequence, and is your chance to make any small improvements.



15 ___ The final stage is to think about the composition you want in the image. In this instance, I wanted to carry on the isometric style, so I arranged the letters along the 30-degree angles on my grid. This gives a cool false perspective to the piece. As before, you can experiment and arrange the words however you like – staggered, descending or straight. Play around and see what looks best. The last thing I did was add a gradient in the background to ground the piece and accentuate my light source. I also added a light amount of Film Grain to help with the retro-futuristic feel.

**01 (opposite)** Through LogoLounge, Gardner has become **a global authority on logo design** in the fast-changing digital era

# Bill Gardner

## LogoLounge's founder and chief curator discusses the ingredients of a great logo, and how this impacts on his own creative practice at Gardner Design

**Bill Gardner**
Founder of Wichita-based studio Gardner Design, Gardner has worked with clients such as Pepsi, Nissan and Pizza Hut. With many thousands of submissions each year from all over the world, his LogoLounge.com site provides a birds' eye view of the industry that manifests itself as an annual trend report, as well as a series of books.
www.gardnerdesign.com

**What does the Coca-Cola logo smell like? What noise would Nike's famous tick make if you dropped it? How heavy would Shell's seashell motif be in the palm of your hand?** These may seem to be peculiar questions to ask of corporate identity and branding. But not if you're Bill Gardner, logo obsessive and founder of LogoLounge (www.logolounge.com) – not by a long shot. Because Gardner is more than just a logo designer and author – he's a curator, archivist, critic and analyst in one. When he holds forth on matters of branding, you should listen. And thousands of us do.

Through LogoLounge and his accompanying series of books, Gardner has become the high priest of logos. His annual trends lists shine a spotlight on the great and the good in the world of branding design, while his own company, Gardner Design, completes work for some of America's biggest brands.

But it's not just pure design aesthetics that interest Gardner. Through his incisive analysis he weaves a link between social and cultural shifts and traditional design examination. Which is why he raises such conundrums as what the Coca-Cola logo smells like.

Logos look the way they do thanks to many more factors than just the design process itself, Gardner believes. Logos have a genetic map, amassed through a mind-boggling array of different factors – from a brand's heritage to the current political climate, through to nationality, history, even the sound of the brand's name. This combines to lend specific characteristics to a brand, which all designers can use as building blocks in order to better understand what the logo should naturally look, feel or even smell like.

A logo's primary use is no longer just on the printed page. Modern logos must work in a multitude of situations, and so need to be easily adaptable. But while Gardner identifies the theory and process of winning designs, he doesn't claim to possess a secret formula for great logos. In fact, he's adamant there are no skill sets or knowledge that make for a great logo designer: "When I was a college student in the early 80s I called up the great Saul Bass one day and asked if I could pay him a visit," recalls Gardner. "He kindly agreed to see me, and I sat →

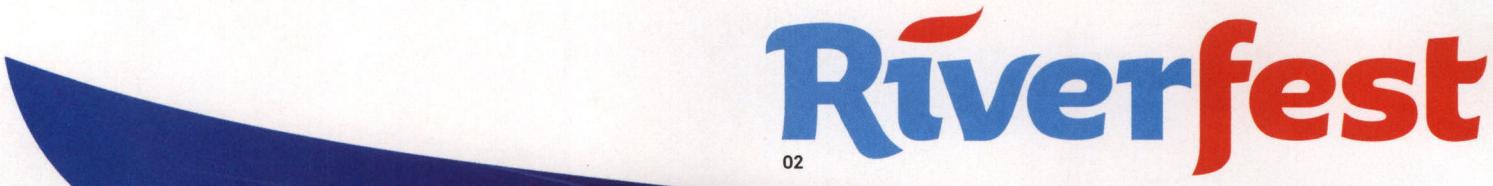
Copp Media Services
Busch Gardens
cares
Riverfest
CHAPADA
CHOPHOUSE AND CHURRASCARIA
COLLEGE HILL
A&M
UPHOLSTERY
TRADE
MARK

**02** This annual 10-day community festival in Wichita was **refreshed with a new identity for its 40th anniversary**, with elements representing the sun, fireworks and the river

**03** Logo for Aviation Business International, a plane refit service. **The wing image speaks of flight** without being aircraft specific and radiating lines signify the renewal process

**04** The **overlapping transparencies** on this marketing company's marque represent the overlapping regions on a media reach map, and the colours resemble an RGB palette

**05** Towerhawk, a property protection service, has a hawk in its logo to **demonstrate the vigilance and professional nature** of its service

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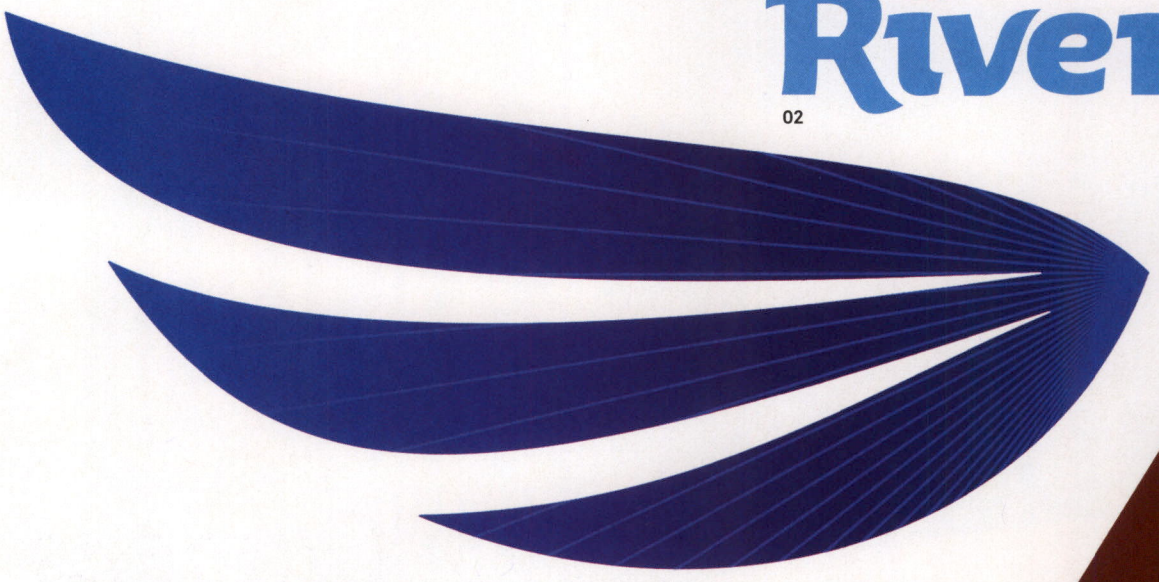
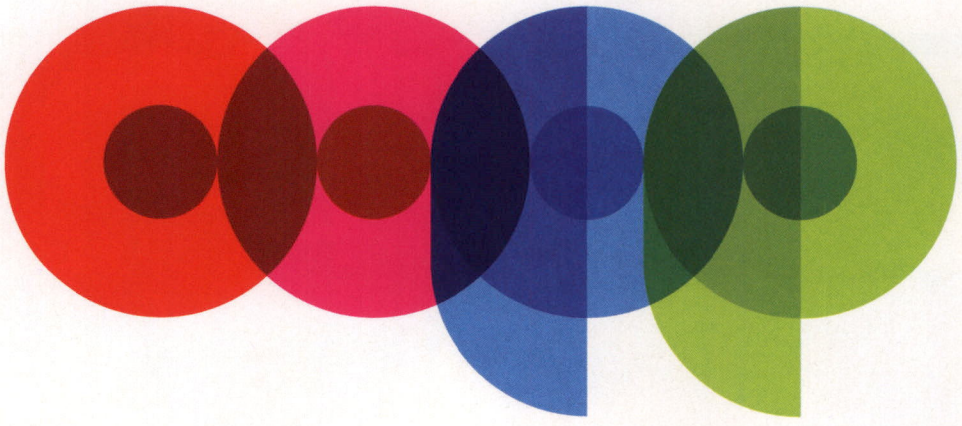


03



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04

05

→ there in awe of this man, bombarding him with questions on what the secret of design was, what magic formulae he used to create all of his great work. After a while he stopped me mid-flow and yelled 'Bill, there are no secrets! You just got to learn how to do it'. That's my attitude to logo design: no secrets, no tricks, just learn how to do it properly."

For Gardner and his team at Gardner Design, that means research – and lots of it. He compares his methods to the rapid-fire questioning of a speed-dating session, aimed at defining the DNA of the brand in question: "We try to learn everything we can as quickly and thoroughly as we can," he says. "Your background, your plans for the future, what you're doing now; tell me about your family, where you live, where you work; what's your favourite music, artist, colour, drink and so on. And also, what do you dislike?

"All of these things tell you something about an individual," Gardner continues. "Clients tell us this is like going to the shrink. It's not far from it, but it will make them give second consideration to information they assume."

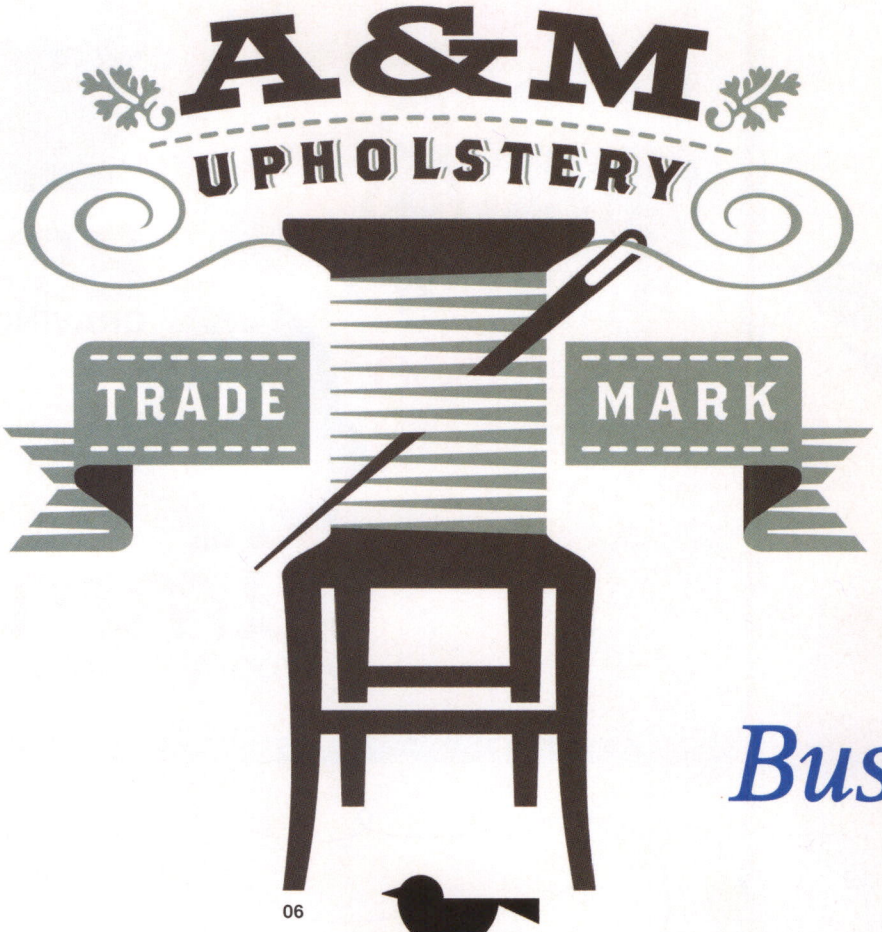
The information that this process gleans doesn't necessarily translate directly into designing, but it is integral to establishing the DNA of a brand. As a direct consequence of the digital age, in order to remain up-to-date, corporations rebrand more often but in ways that bow to trends, rather than pushing at them – which is where drilling to the true heart of a brand's identity becomes so crucial.

**06** A&M is a furniture upholstery service with an upmarket clientele. The thread and the hand-stitching with a needle blend well with a traditional chair to form the logo, and the type **plays out a feeling of embellishment**

**07** This conservation park has **a whale's tail and human hands** in its logo to signify the connection between humans and animals

**08** The logo for this neighourhood group, **which includes many stately homes**, was inspired by the wrought iron gates in the area

**09** A Brazilian monkey became the face of Chapada, a restaurant chain serving **South American-inspired cuts of meat**

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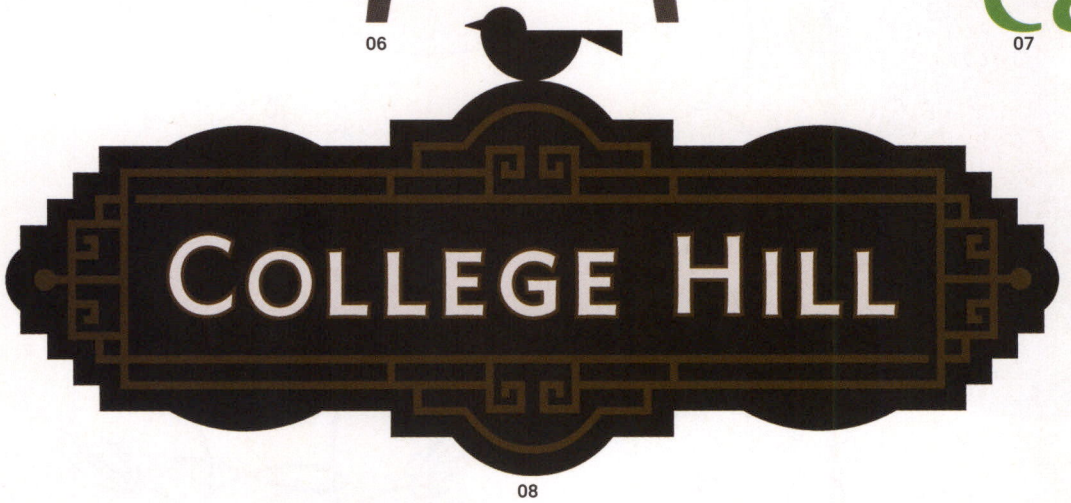



08

09

"It's easy to say that trends go out because they're dated," he says. "But one of the costs of the internet is that trends within design are becoming more mercurial and changing more quickly. Before, it could take a year or so before your brand actually travelled the world, and that's on top of the research and design period," says Gardner. "Now we're seeing companies update themselves with such immediacy that trends transfer far more quickly, so the whole longevity of trends – and therefore a brand – has narrowed significantly."

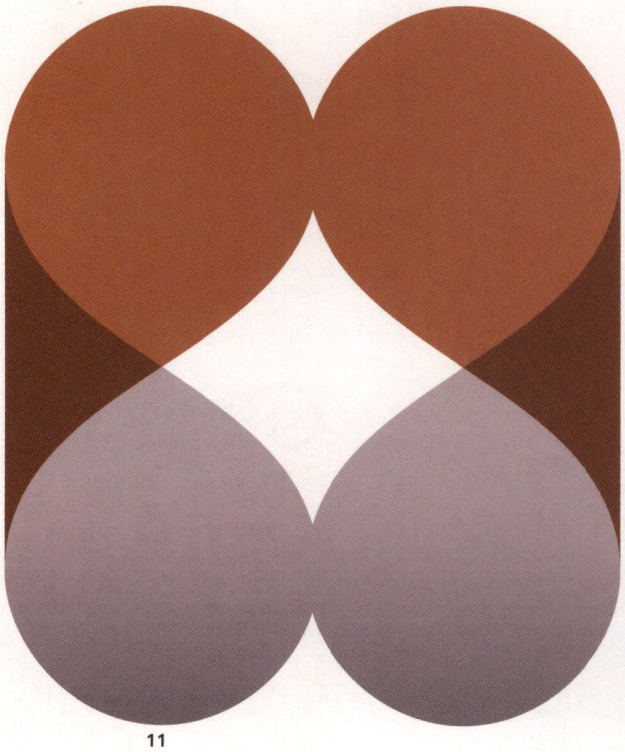
Like much of contemporary design, mainstream, middle-of-the road identity creation is populated by trend-chasing projects. This, argues Gardner, is a direct result of the fleeting nature of the modern industry. But surely a well-produced logo can become a timeless entity? Take Carolyn Davidson's Nike 'swoosh'. The logo still works today, 39 years after its design. But think about its contextual use for a moment, says Gardner: "It's true that the Nike swoosh has stood the test of time, but when you consider the number of type solutions that have appeared with it over the years, or the number of textures and bevelling and gradations that have been applied to the logo, you can see that it is not an unmodified identity. Just considering the number of dimensional and material variations of the logo as it is applied to shoes alone is mind-boggling."

So does this hint at the nature of the perfect logo – one that can exist and speak for a brand independently of any other context, yet at the same time be pliable enough to adopt important trends as and when they appear? →

**10** Southern States Energy Board manages energy across multiple US states. The eagle and star represent the USA, **with the leaf indicating sustainable** energy, and its veins representing the letter 'E' for energy

**11** Kansas Heart Hospital needed **a new look to match its revitalisation**. Gardner Design's logo solution represents the hearts of the patient and carer coming together

10

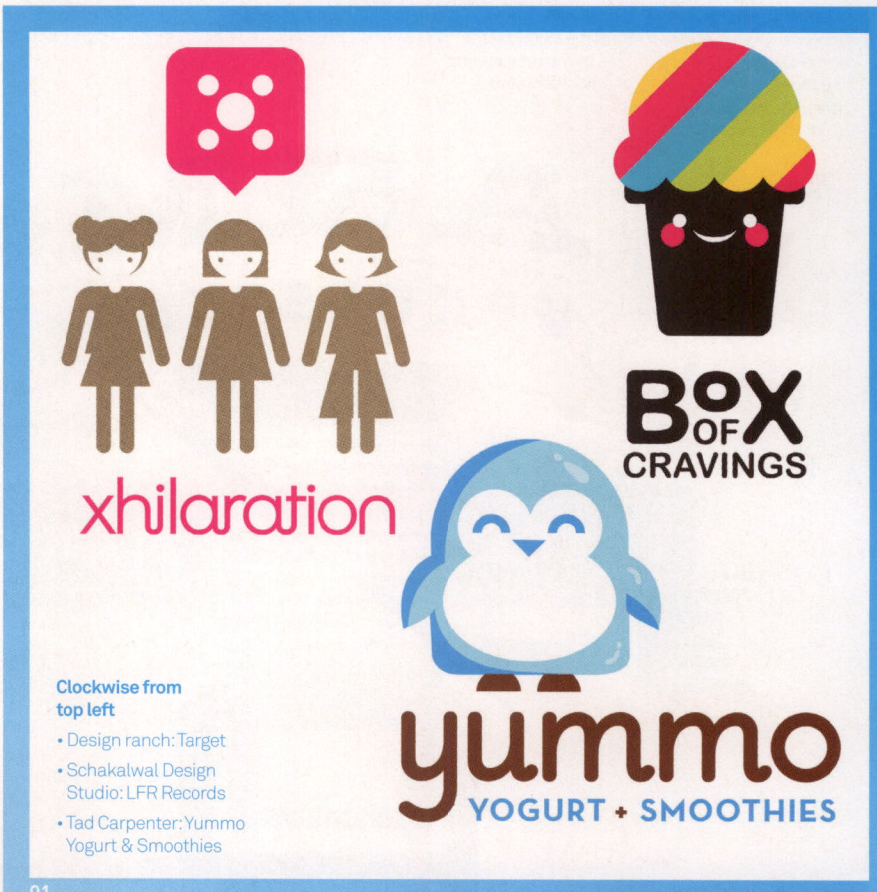


11

→ According to Gardner, the answer to this is yes and no. He clearly doesn't believe that the perfect logo actually exists. For him, logos are transient – intended for short-term, purposeful use – which is precisely why the notion of trends interests him so deeply.

"Good designers are those who embrace the equity in a good identity they inherit," concludes Gardner. "Too often, people believe they have been hired because they are the Messiah, and thus able to change history and give a new face to the industry. This lack of maturity and understanding has killed far too many great identities before their time."

**Pro software skills:** Illustrator




**Clockwise from top left**

- Design ranch: Target
- Schakalwal Design Studio: LFR Records
- Tad Carpenter: Yummo Yogurt & Smoothies

01

**Clockwise from top left**

- Vistaprint: Vistaprint
- RDQLUS Creative: Expeditiously Delicious
- FCB Durban: Oubaai

02

**Clockwise from top left**

- Siren Design: Berkeley Estates
- Vladimir Isaev: Telecom Trade Company
- Dee Duncan: Razorfish

03

**Clockwise from top left**

- notamedia: gogol.tv
- Sommese Design: State College State Theatre
- Clover Creative Group: LLC, CLOVR Media Inc.

04

**Clockwise from top left**

- 1310 Studios: Small Hands Big Art
- Gerren Lamson: NONA
- Odney: MBT's

05

## Gardner's top five logo trends this year

### 1 Juvi

"These are logos that look like Napster had his way with Hello Kitty: far too cute, with the smell of cigarettes on their breath. We've seen this coming for some time, but last year the trend reached a tipping point. Designers' fascination with the characters from popular culture has led to the adorable personification of the logo design industry's output.

"Society has become comfortable with the endorsement of anything bearing a smile. Gaming characters, Twitter birds, manga literature – all inundate a new generation's visual diet. At every on-screen internet pop-up, there's an opportunity to have your mug shot translated into a cutesy two-dimensional avatar.

"These aren't just the cereal box characters that coaxed a generation to the breakfast table. These logos are simple, often geometric and monoweight in line. Anticipate their audience to be tech savvy and relatively new to a paycheck."

### 2 Monoline

"These are like the waifs that prance down a haute couture runway — or just logo design on a diet. Not merely Felix Sockwell knock-offs, but well-drawn solutions in their own right, with the line weight dialled into 'hairline'. To achieve maximum contrast with minimal dimension, they most often appear black on white.

"There is a certain elegance in an ultra-thin line, and this has never been lost on designers. Challenging as these may be on aging eyes, when designed well and not under-scaled, they are guaranteed to coax a pair of glasses from the viewer's pocket.

"More than a few typographic marks have also joined this movement in the last year, across both script and sans serif display type. Note that in the type and illustration solutions, the line is not variable but rather a mono-weight."

### 3 Buckys

"Tangrams be damned. As Buckminster Fuller – father of the geodesic dome – suggested, the triangle is the only flex-cornered polygon that holds its shape, and so accounts for all structural shaping in the universe. Designers are embracing the use of these modules to carve out space, dimension, and shape. The clustering of many triangles to form a greater whole tells the story of strength in numbers, and can also create a beautiful mosaic of diversity.

"Bass Ale took ownership of the single red triangle as one of the oldest recognised trademarks on record. That single, perfect geometric shape is certainly iconic, but it's also an unpleasant bear with which to design. Single triangular logos may be stable, but they nestle poorly with type and can create awkward negative areas. Pair them, triple them or batch them up, and they become a wonderful, malleable skin that can be arranged to take on almost any shape or dimension – and, with Bucky's approval, the strongest shape in the universe."

### 4 Concentric

"Yes, they're pushing the boundaries on acceptable levels of detail and reproduction challenges. But this crop of logos has an almost hypnotic mystique. Repetition of fine lines, concentrically crafted into an image, may symbolically achieve the same effect as the cross-section of a tree telling the story of a life. It can be the tale of a journey, or the timeline of a process. Scientific in nature, these marks are closely tied to the technology that helped spring them to life.

"These designs are almost a cross-pollination of Spirograms (mentioned in 2010's trend report) and Jawbreakers (discussed in 2008). Many of these may conjure up a Timothy Leary moment. Whether used as the foundation of the mark or just as a portion, these solutions have dizzying impact. They force you to confront the mark, and demand a reaction."

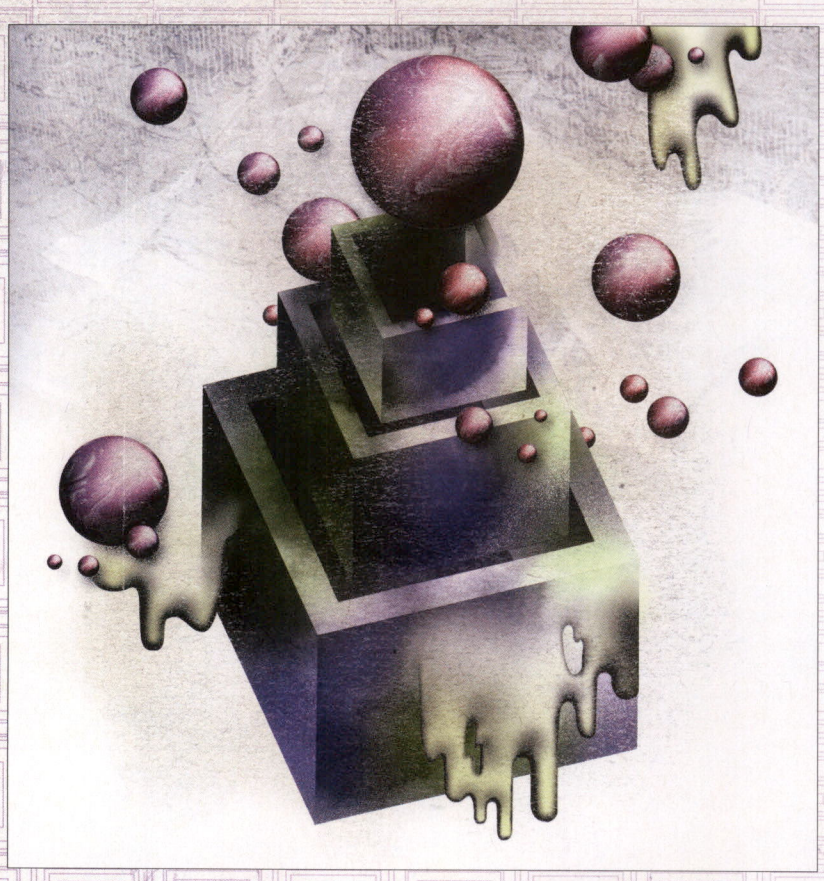
### 5 Brown

"Every year we see colour preferences ebb and flow. In 2011, with full apologies to UPS' already iconic brown mark, other designers discovered what brown could do for them. This was a rather abrupt and more universal movement: it's as if the volume knob had been pegged on black for maximum contrast for the last two decades, and we suddenly discovered it could be turned down and consumers could still hear us. This movement is about subtleties, and is indicative of a new generation, with tone ranges from sepias to chocolates and even warmer.

"Saturation levels of secondary colours have dropped back as well. Pinks always work well with brown, but other colours are being paired up here as well. These are generally clean colours that have had their chroma drained by half."



**Pro software skills:** Illustrator



# PACKAGING TOP 50

Refine your packaging design workflow with 50 expert tips for getting more from Illustrator

## 1 Start with a grid

Base blank canvases on a grid when creating new artwork. The same principles apply when working on curved artwork – such as a label for a tapered container – except the grid needs to follow the contours of the curve. This is particularly useful when introducing type.

## 2 Duplicate dielines

Copy dielines to a second layer for a quick way of checking that they haven't been modified. Adjust the colour and turn this layer off. Switch it back on as and when required, and compare your dielines against this template layer to check they're still in place.

## 3 Detect white overprint

The White OP Detector plug-in for Illustrator CS3–5 (www.bit.ly/White_OP_Detector) detects art and text erroneously set to overprint – which can be easy to miss when recolouring artwork on a tight deadline with View>Overprint Preview switched off. There's a fully functional free version, while the slightly less free version costs $7 for one Mac or $50 for unlimited users at one location.

## 4 Mass-adjust colour bars

Save time by increasing or decreasing all colour bars simultaneously in Illustrator's Color window. Hold down Alt+Shift or Ctrl/Cmd+Shift before sliding the triangle indicators up or down. In CMYK, for example, this moves all four values up or down at once, quickly producing a darker or lighter hue of the same colour.

## 5 Place multiple images

If you have multiple images in a folder that need to be placed in an Illustrator document, you don't need to waste time repeatedly using File>Place to insert them one by one. Highlight and select all the relevant files, and drag them on to your document – this places them all in one go.

## 6 Map and wrap

While the Perspective Grid tool (Shift+P) – newly added in CS5 – and Effect>3D>Extrude & Bevel are handy for demonstrating packaging concepts to clients, the artwork mapping option (Effect>3D>Extrude & Bevel>Map Art or Effect>3D>Revolve>Map Art) is even more useful – save 2D artworks as symbols (F8) and use Map Art to 'wrap' them on to 3D objects.

## 7 Essential testing

Test carefully before developing artwork, or you may end up wasting time making complex adjustments.

Obviously cylindrical designs won't look the same once they're made up, while round or curved surfaces look significantly different when the artwork is flat, so always test it thoroughly.

## 8 Equally spaced artboards

Space multiple artboards (CS4 onwards) equally – for instance, via the Spacing field in the New Document options dialogue box – so you can easily duplicate information across multiple variations of a pack. To move a cutter across artboards spaced 10mm apart, you'll just need to add 10mm to the artboard width to calculate the right move distance.

## 9 Shape Builder tool

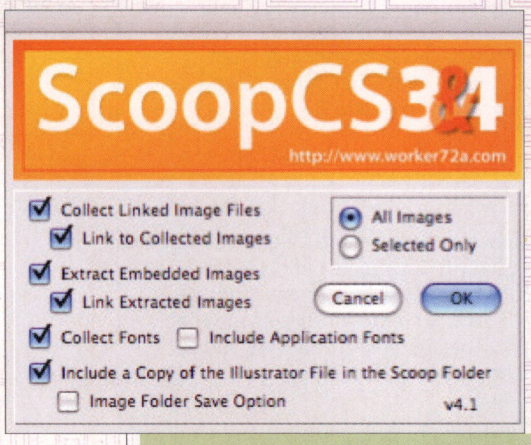
Simplification is key when dealing with complex multi-layered packaging design artworks, given that you need to keep things as streamlined as possible to avoid any unnecessary complications during the production stages. Illustrator's Shape Builder tool (Shift+M) is particularly useful here for simply and efficiently joining overlapping objects.

## 10 Sync colour settings

Go to Bridge and sync your colour settings using Edit>Creative Suite Colour Settings>Apply if you're working on a piece of packaging design in more than one application. Otherwise, you run the risk of using colours in Illustrator that aren't exactly the same in other applications within Creative Suite.

## 11 PASTE REMEMBERS LAYERS

To repeat a structure between documents without flattening it – if you set up a layer to have a background image, vector work and a Photoshop visual, for example – simply go into the Options menu in the Layers palette and select Paste Remembers Layers. This should then already be ticked when you reopen the menu.




## 12 COLLECT SUPPORT FILES WITH SCOOP

Use the Scoop plug-in (www.bit.ly/Scoop_CS345) to collect support files for output. It's a built-in feature of InDesign, but not Illustrator. Scoop goes into your file, collects up the images and fonts used, and saves them all in a folder. Ideal for sending to print, creating mock-ups or archiving complete jobs.

## 13 Improved transparency

Raster image processors have got much better at handling transparency than they used to be. Transparency previously had to be weeded out – by changing transparencies to tints, say – but it's now being dealt with much more efficiently and you can use Illustrator's transparency masks even when working with spot colours.

## 14 Manage layers carefully

Given the need to keep your packaging artworks as organised as possible, use layers in a regimented fashion – don't just throw them around. Introduce separate layers for trim lines, bleed lines, special finishes and so on, and try to minimise excessive use of layers wherever possible.

## 15 Layer effects

Layer your effects in Illustrator's Appearance panel and it will act almost like Photoshop. So if, for example, you've got a logo, a gradient running through it, a bevel embossed on it and a drop-shadow as well, you can control all of these effects via the Appearance panel.

## 16 Customise keyboard shortcuts

Set shortcuts for commands you use frequently. File>Place, for example, doesn't actually have a pre-set key command. Define your own via Edit>Keyboard Cuts (or Ctrl/Cmd+Alt/Opt+Shift+K).

The program will warn you if you're trying to set a shortcut that clashes with an existing one and will give you the option to override it.

## 17 Make master symbols

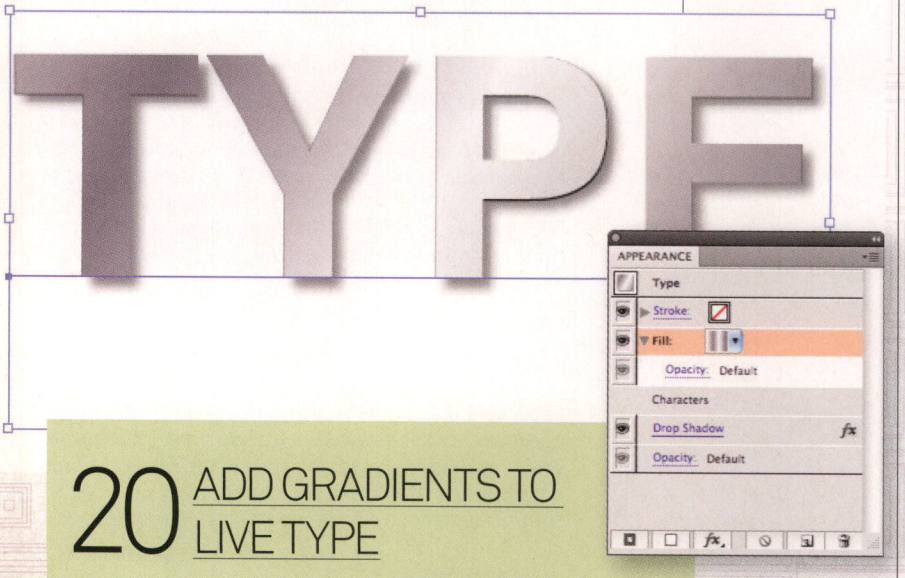
As packaging artworks may feature multiple iterations of the same logo, use the Symbols panel (Ctrl/Cmd+Shift +11) to avoid having to repeat changes across each one. Simply create the logo as a symbol and drag this onto the document. That way, you can update every instance of the logo by simply editing your master symbol.

## 18 Distrust dielines

Never assume that your dielines are correct. When setting them up, always print and make up a prototype so you can check all dielines are in exactly the right place. There's no point starting work on a packaging design until you've assembled a prototype and checked your measurements are exactly right.

## 19 Built-in metallics

Illustrator's swatch libraries make it easy to simulate metallics. In Swatches>Open Swatch Library>Metals you'll find silvers, golds and bronzes ready-built, enabling you to create an object such as a gold medal by simply clicking on gold, rather than having to drag in browns, oranges and yellows.




## 20 ADD GRADIENTS TO LIVE TYPE

Illustrator's Appearance panel lets you add a gradient to live type. Simply save the gradient in the Swatch panel, open the Appearance panel with the type selected and add the gradient from there. This does add a faint grey line, however, so you'll need to redo it after finalising your design.

## 21 Turn routine steps into actions

If you always follow the same routine when starting a new packaging document – making a certain number of artboards, deleting unused swatches and pasting in a brand logo, for example – set up an action via Action>New Action so that Illustrator will repeat your routine steps with one command.

## 22 Rectangular eraser

You can constrain the Eraser tool to a rectangle by simply holding down Alt/Opt while using it, which enables you to make straight cuts. This is much better for cropping things out, such as when you've live-traced an image and want to chop the bottom off.

## 23 Select-all on a layer

You can select everything within a given layer by clicking on the small circle that appears over to the right-hand side of the name of each layer listed within the Layers panel. This means that you don't need to worry about locking the other layers beforehand.

## 24 Make guides with 3D

Use the 3D filter in the Effects menu to create guides if you need help with perspective. For example, if you're creating a cityscape from typography with the street dropping off into a perspective, use the 3D filter to adjust a rectangle, providing a guide for laying out your type and skewing it into place.

## 25 Global colours

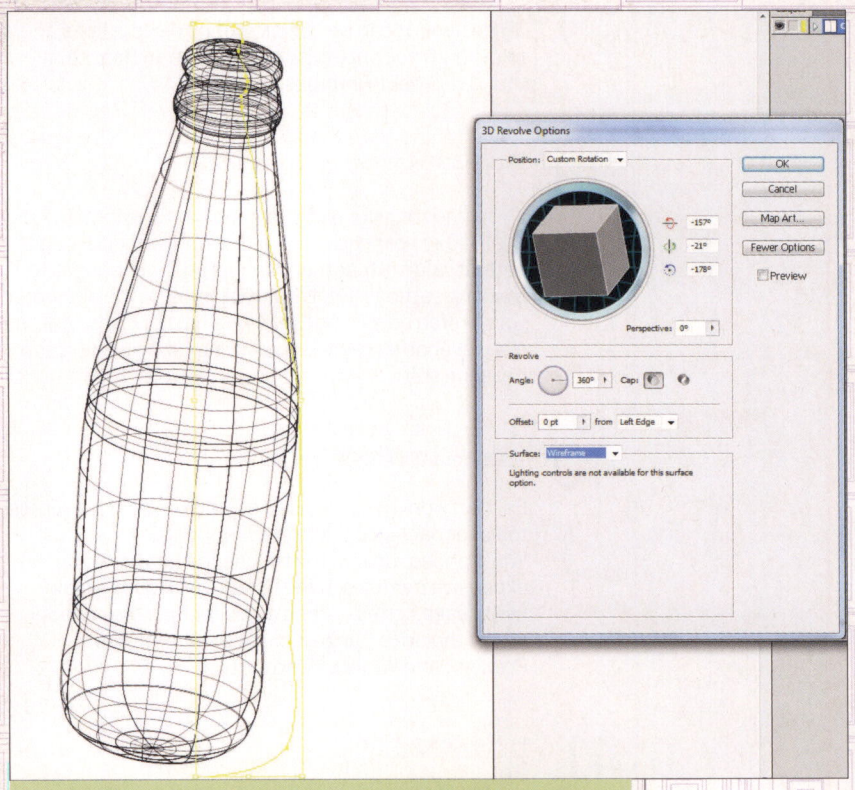
Change colours globally across an Illustrator document by replacing one swatch with another. Simply hold down Alt/Opt, then click-and-drag the new swatch onto the old one. Illustrator will replace every instance of that colour where you've used the swatch (so avoid using the colour picker, which may not be precise).

## 26 Finalised cutter guides

Don't start work without an approved cutter guide. You can get a cutter guide and simplify things by putting folds in one colour and dielines in another, but if you originate a cutter guide or use a work-in-progress, then your client will almost certainly want to make further changes.

## 27 Neat naming conventions

If you're using one PSD file and one AI file, your naming conventions should be exactly the same for both. This makes it really easy to see at a glance just where your links are. That way you can keep things organised if, for instance, you're creating lots of different skews.




## 28 BUILD 3D MODELS WITH REVOLVE

Use Effect>3D>Revolve to build a 3D model by spinning the stroke path at 360 degrees. So if you're mocking up a bottle design, use the Pen tool to draw half the design, then use Revolve. Preview in Wireframe (via the Surface drop-down menu) as the shaded view can be slow to manipulate.

## 29 Custom workspaces

Use Window>Workspace>Save Workspace to create multiple workspaces tailored and streamlined to different stages of the packaging design process, from accessing pens when drawing and moving things out of the way during colour work, to putting your origination tools out of sight while doing treatment. Edit via Window>Workspace>Manage Workspaces.

## 30 Production accuracy

Some of the tricks Illustrator can perform during the concept phase may not work well enough for production. You can create a photographic rendering of a package without bringing it into Photoshop, but features like opacity masks may not produce correctly or even show up accurately at the proofing stage.

## 31 Avoid overload

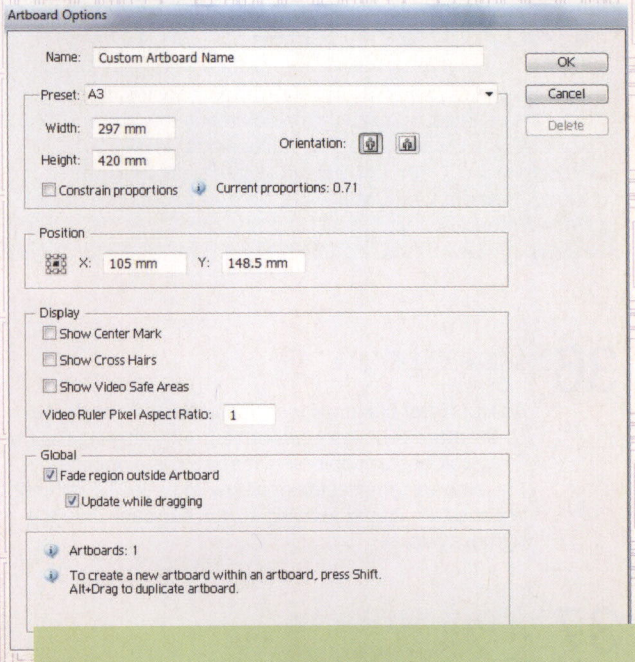
Beware of overloading your Illustrator documents with files that are too high-resolution to work with easily. A good rule of thumb is to work on top of files that have been saved at a maximum size of 150dpi for speed and ease when exporting and saving.

## 32 Notes on a new layer

As well as placing dielines on separate layers, you should also put any annotations you might want to add later on to a dieline – such as labelling front panels or flaps – onto another layer with a clear name (e.g. 'Notes') to ensure it's easy to show or hide these annotations as required.

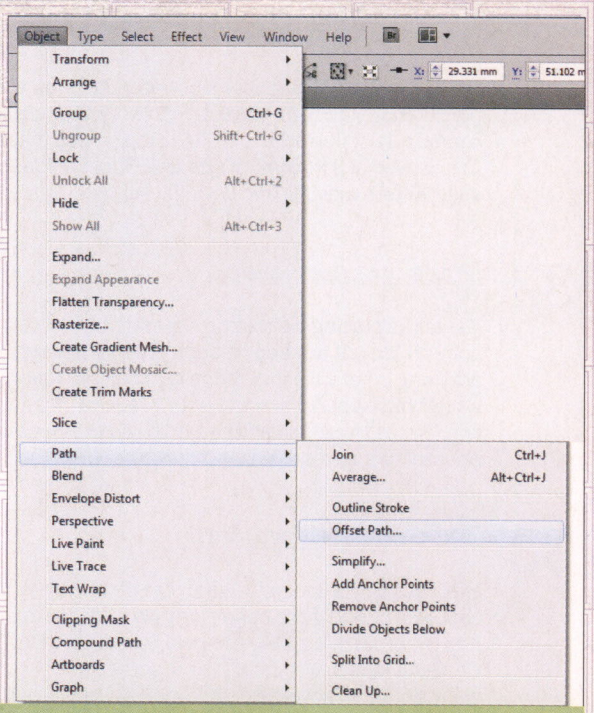
## 33 Zoom out of all artboards

Most designers are well aware that Ctrl/Cmd+0 zooms in or out of the page being worked on, fitting it to the screen. Less well-known is the fact that Ctrl/Cmd+Alt+0 fits everything to the screen and therefore zooms out to display all artboards (CS4 onwards). Don't confuse this with Ctrl/Cmd+Alt/Opt+0, the shortcut for browsing in Bridge.




## 34 CUSTOM ARTBOARD NAMES

CS5 lets you give multiple artboards (added in CS4) individual custom names. Either select the Artboard tool (Shift+O) and type inside the Name field of the Control panel, or double-click the tool to call up the Artboard Options dialogue box. Exported files will retain the relevant custom reference.




## 35 ADD BLEEDS WITH OFFSET PATH

Once you've got a packaging net set up, using the Offset Path tool is the quickest way to add bleed – handy for working with unusual shapes. You can do this via Object>Path>Offset Path and you'll generally find that 3mm is sufficient but, as always, be sure to double-check with your printer.

## 36 Copy and rotate

As Illustrator currently lacks a Rotate View tool, you can't rotate your work without actually altering the file. To avoid constant spinning, it's helpful to duplicate a file, place a copy beside or below what you're working on, and turn it upside down so you see each side the right way up.

## 37 Align to Key Objects

To align or distribute several objects to one specific Key Object (without this object moving, say), select the objects to be aligned and click once (no shortcut keys needed) on your designated Key Object before aligning or distributing via the Align or Control panels. A second click turns the Key Object off again.

## 38 Strata's Enfold 3D CX

This plug-in (www.bit.ly/Enfold_3D_CX) is a handy app that can be used to turn 2D artwork into folded 3D designs. It can be used to define die-cut lines and folds, and mock up a visual that you can then spin round in order to impress clients.

## 39 Increase tracking precision

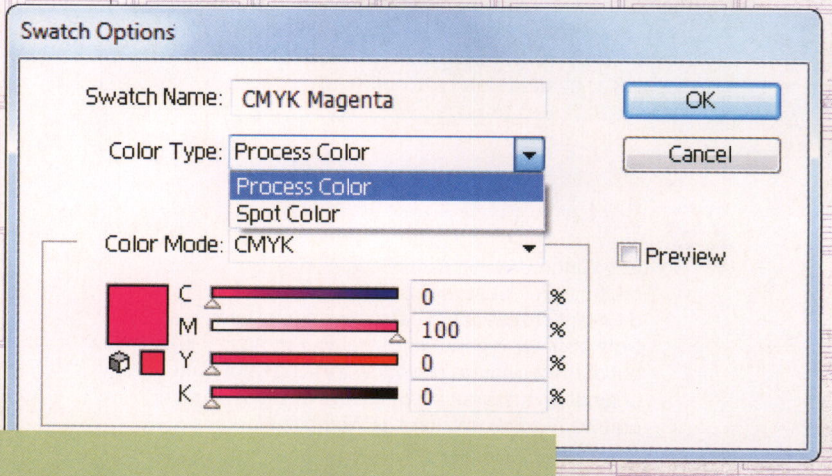
If you find that Illustrator's default setting for tracking, 20/1000 em per click, isn't sufficiently precise, edit the default value rather than making ad-hoc changes to tracking settings. Go to Edit>Preferred>Type and enter your preferred setting. Using the Type options, you can also reset other default values, including leading and baseline shift.

## 40 EskoArtwork DeskPack

EskoArtwork has produced a great range of pre-press tools for packaging designers working in Illustrator. While prices run into the thousands for the more expensive modules in the EskoArtwork DeskPack (www.esko.com/deskpack), the tools at the cheaper end of the price-range include Dynamic Panels, Preflight and White Underprint.

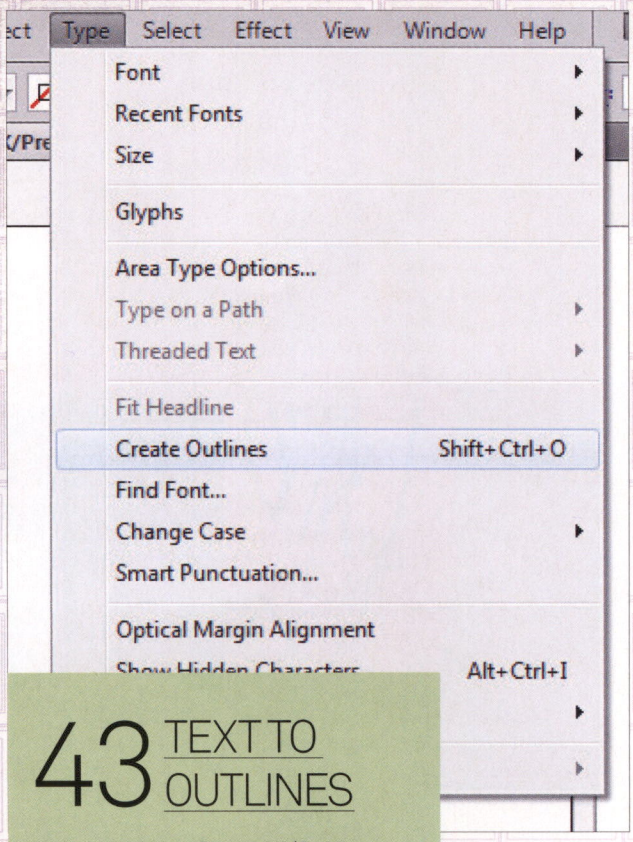
## 41 Hide selections

Using Ctrl/Cmd+3 to hide a selection is a great non-destructive method for moving an object out of your way to access whatever's behind it – you don't risk losing the object as you would if you cut it and then accidentally cleared the clipboard. Use Ctrl/Cmd+Alt+Opt+3 to show/unhide your work.




## 42 QUICK COLOUR CONVERSION

You can easily convert spot colours to process colours without needing to go into Illustrator's Print dialogue options. Within the Swatches panel, double-click the colour you want to convert, which brings up the Swatch Options dialogue box, and choose from the Process and Spot Colour options in the Colour Type drop-down menu.




## 43 TEXT TO OUTLINES

Although hitting Select All (Ctrl/Cmd+A) and using Type>Create Outlines (Ctrl/Cmd+Shift+0) to convert text to outlines will ensure that your text prints correctly, as text on packaging may be subject to last-minute changes – such as to ingredient lists on food packing. De-select copy that's liable to change, rather than rendering all text uneditable.

## 44 FoldUP! 3D

Use FoldUP! 3D (www.bit.ly/Fold_up_3D) for a quick digital preview of folded packaging designs – an add-on that's highly useful for modelling your designs, it works with any version of Illustrator. FoldUP! 3D lets you observe the folding process stage by stage, and view your mock-ups from any angle.

## 45 Save, save, and save again

When working on numerous versions of a packaging design, it's all too easy to forgo regular saves. Whereas InDesign salvages unsaved files if the programme crashes, Illustrator currently lacks a similar auto-recovery feature. So if the programme – or your whole system – crashes, you'll lose any unsaved changes.

Thanks to... Mark Armstrong at Blue Marlin, Duncan Eldridge at Honey Creative, Julien Pons, Andy Gutowski at Object 9, Blair Thomson at Believe In, Juan Padraza at Smith & Milton, Mark Teisler-Goldsmith at Dragon Rouge, Daniel Gross at aNEW, Barry Darnell at Made By Analogue

## 46 VectorScribe

Can't seem to find the BetterHandles plug-in? Astute Graphics has bought Nineblock Software's IP and absorbed its products into new plug-in VectorScribe (www.bit.ly/VectorScribe). A trial version is included with this magazine's free disc. BetterHandles makes it easier to work with Bezier curve handles, has now been turned into the PathScribe tool within VectorScribe.

## 47 Masked improvements

Masking is much more intuitive in CS5. Previously, it would still be possible to select placed images outside of the actual masked area – a potential catalyst for chaos if you were using multiple makes and images. There's need to shy away from it now: what you grab is what you get.

## 48 Back up custom workspaces

Don't just save your custom workspaces, back them up outside of your machine – for example on an external flash drive or using data cloud storage. Aside from being able to recover them if needed, having them stored externally will also enable you to access your settings from other computers.

## 49 Stop auto-expansion

In some versions of Illustrator, using Pathfinder to select images makes them expand automatically so that you lose the original data. To stop this from happening and ensure a non-destructive workflow, simply hold down Alt/Opt before clicking the Select tool, and the object won't expand automatically.

## 50 Trace handwriting by hand

While you can use Object>Live Trace to trace images and convert to vector artwork, avoid relying on this automated option when introducing handwritten elements that need to be vector-based. Instead, always trace manually from scans, point by point, and then adjust as needed to suit the artwork.

Illustrator CS3 or later

# Prepare a dieline for production

Honey Creative's head of production **Duncan Eldridge** reveals his process for getting packaging ready for print

**If you've worked on packaging design projects, you'll probably be familiar with using Illustrator to create dielines.** However, there are still lots of nifty ways to squeeze the most out of the software that you may not yet be aware of.

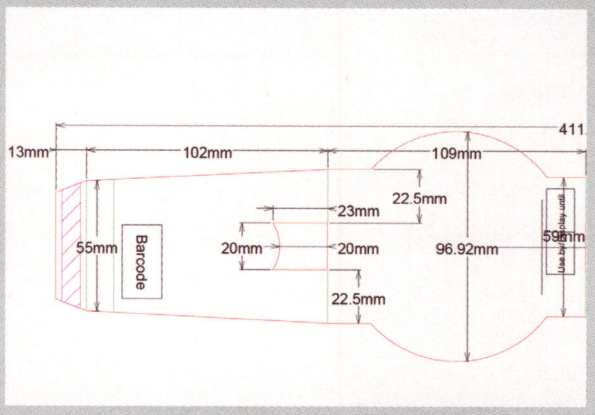
Using the example of a range of microwavable meal containers we created for Tesco, I'll talk you through how to maximize Illustrator's potential at every step of the design process. In this instance the client wanted a 'watch-strap' style sleeve that allowed the consumer to see the fresh food ingredients in the clear pot. The design had to be informative yet still let the product speak.

When working on a packaging project, establishing the client's expectations as well any constraints early in the design process is the key to success. Ideally arrange a pre-production meeting with the client and the printer, and take hard copies of the pack visuals along to ensure that everyone round the table sees them. This will establish whether everyone's expectations of the final design are the same, and save your money, time and professional reputation in the long run.

**Duncan Eldridge**
After graduating from Salford Uni in 1993, Duncan worked in pre-press until the late 90s, when he defected to the design industry. He's specialised in brand packaging since 2000, and became Honey Creative's head of production back in 2009. www.honey-creative.co.uk

**Time needed**
One hour

**Skills**
- Set up and test a packaging dieline
- Produce colour separations for print
- Add detailed production notes for your printer




**01** Before starting work you should be equipped with a dieline (or cutter) that is to scale, includes all folds, trim and bleed, indicates visible, hidden and any 'distorted' areas, and shows print-free glue or seal areas as well as date code and barcode areas. Mocking it up will help clarify how the pack will be displayed, and show any potential issues. Also consider the environment in which the pack will be displayed. Is there any additional shelf-ready packaging or shelving that might obscure the low portion of the pack? If so, indicate this on the dieline.

Print Process: Litho
Colours: 6 - CMYK plus 2 Spot Colour as required.

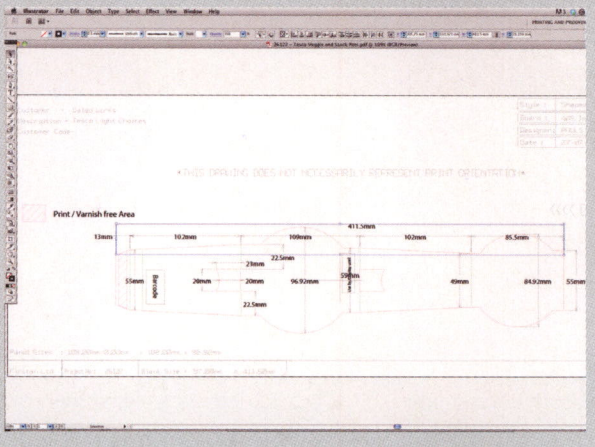
Accepted formats:

PDF's - Press or High Quality.

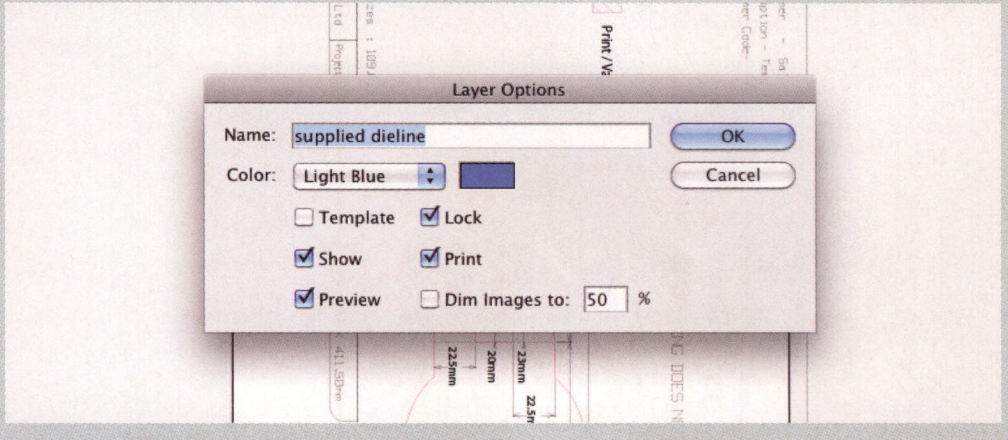
Illustrator - All Fonts need to be Outlined and saved as eps.

Photoshop - Layers all flattened and Text Rasterised 300 dpi.

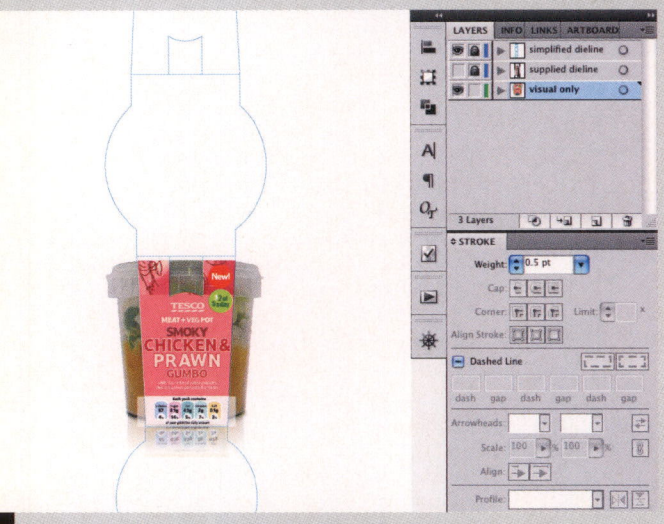
**02** If you are generating the dieline yourself, consult and involve the printer. Make sure they can mass-produce the pack within the brief's constraints, and don't start work until they have approved it. Don't be too precious – if the printer wants to redraw it and supply back to you, let them. And don't start work until you have received a print spec. At the very least this should include the print process and number of colours available.



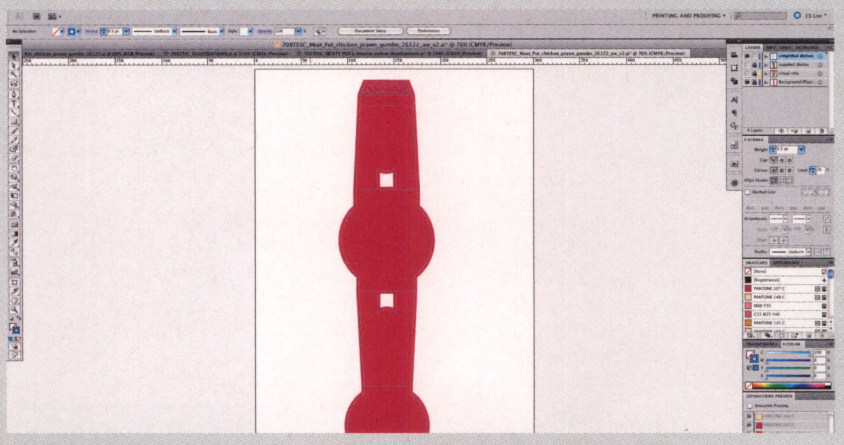

**03** Open your dieline in Illustrator and double check that it's to size by selecting an element and cross-referencing its size values in the Control panel against what's specified in the mark-up. Rotate the cutter if necessary and adjust your artboard size to accommodate additional mark-ups you might need to add later. Go to File>Document Colour Mode and make sure 'CMYK' colour is checked. Then save the file, renaming it according to the packaging you are producing. Include some reference for the cutter in your file name. Save as Illustrator 3 or 4 with PDF compatibility ticked.




**04** In the Layers palette rename the cutter guide layer as 'Supplied Dieline'. Duplicate the layer and rename it 'Simplified Dieline'. Delete all elements other than the trim, folds, barcode, date code and non-printing areas. Then go to Edit>Select All. Go to Window>Colours and define all the strokes with a colour that is clearly visible against the design underneath, then go to Window>Output>Attributes and check Overprint. Turn the Supplied Dieline layer's visibility off.

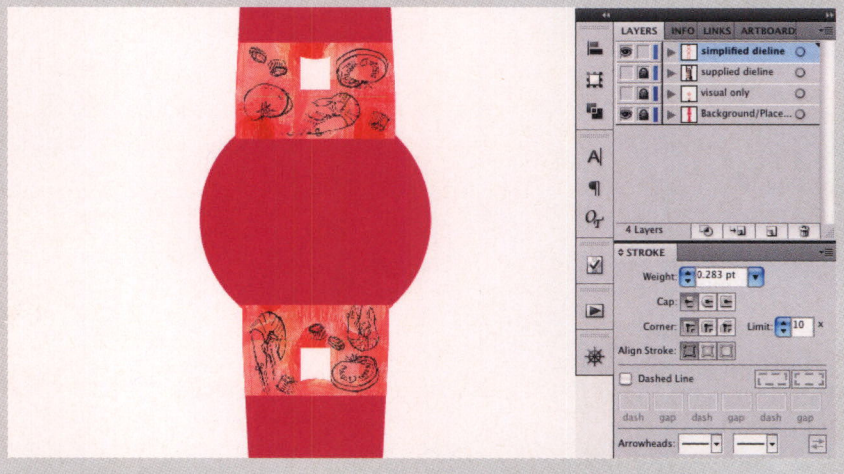



05 Create a new layer below the simplified dieline named 'Visual Only'. Open your signed-off design visual, drag over the design with the Selection tool (V) then copy the whole file. Close the file and paste it under the Simplified Dieline layer, then position it as accurately as possible.



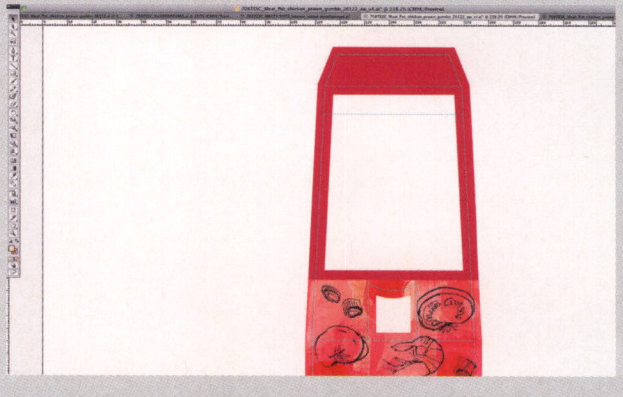
06 If the design has any full-bleed elements then use the line work from the Supplied Dieline layer to create a background with bleed. Create a new layer below the Visual Only layer titled 'Background/Placed Images'. If the supplied dieline has a defined bleed area, then select the path with the Selection tool and duplicate it onto Option, then drag down to the Background/Placed Images layer. If the dieline only has the trim, duplicate it and go to Object>Path>Offset Path to create a bleed area. Depending on the condition of the supplied dieline, you may have to work your way round the trim using Ctrl/Cmd+J to join the path up into one compound.

07 Refer to the brand's packaging guidelines and check that all design elements comply with them, make amendments if necessary, and get client sign-off.

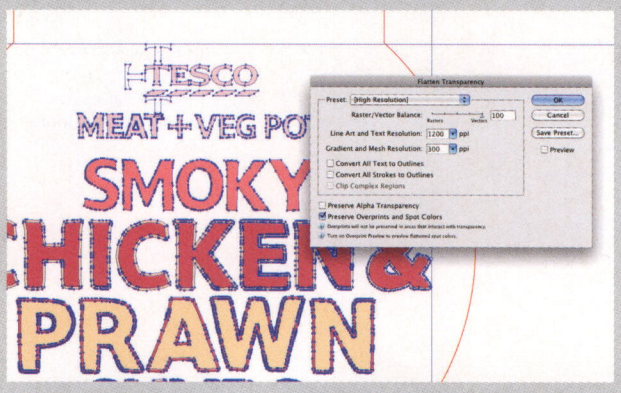



08 Populate the background layer with all the full-bleed elements of the design. Re-link any low-res positional images with hi-res CMYK PSDs or TIFs. Delete these elements from the Visual Only layer.

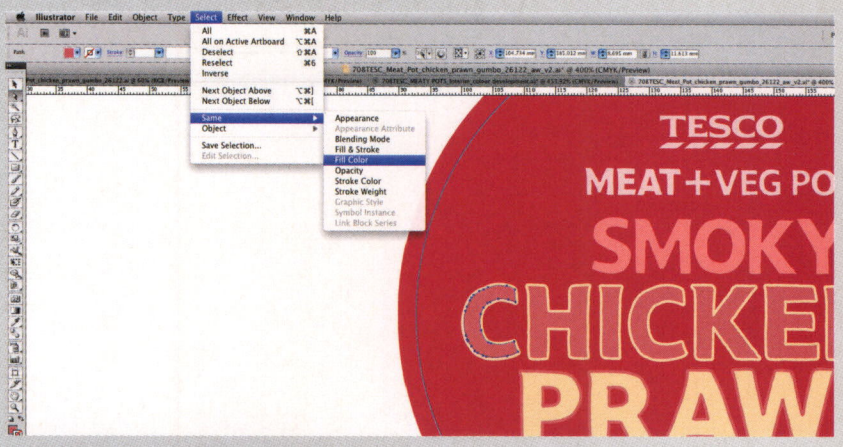
09 Now you should just have graphic elements on the Visual Only layer, such as logos, title, descriptor and so on. Create a duplicate of this layer below Visual Only, and name it 'Graphics'.



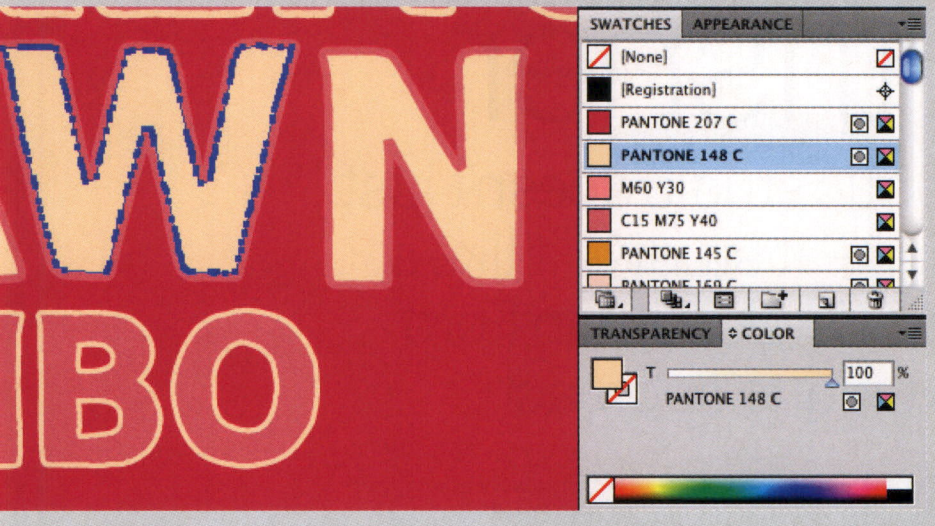
10 You may want to create a separate layer for any back of pack (BOP) content. If it is upside down, select it and spin it 180 degrees to read it without having to rotate the entire design. The example shown here has no back of pack content, as in this instance the repro house had a kit of parts that enabled them to populate a BOP quickly and consistently.



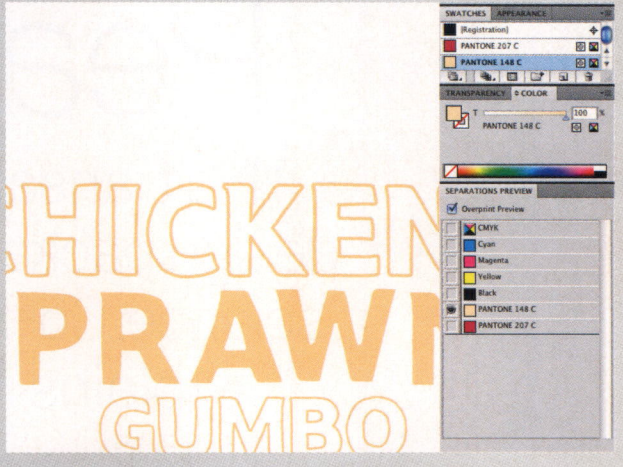

**11**___ Now expand any effects. Select All (Ctrl/Cmd A) and go to Object>Expand. Expand appearance on any strokes with complex art brushes by selecting Object>Expand Appearance and calculate the minimum stroke. Avoid going below .25pt. If in doubt, check the print spec for minimum positive/negative stroke weight. If there's any transparency involving spot colours then flatten it (Object>Flatten Transparency) and recreate using tints of the relevant spot colour (Window>Colour).



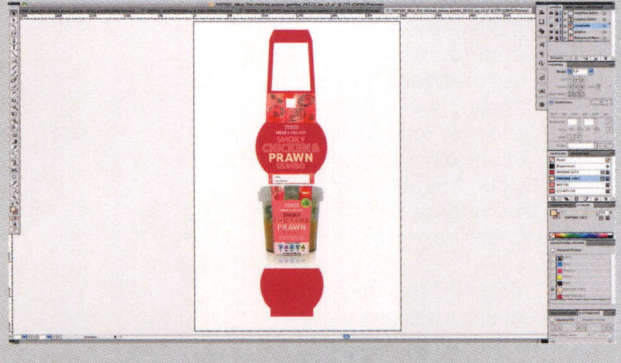

**12**___ Open the Swatches panel (F5). Use the Direct Selection tool (A) to select an element and go to Select>Same>Fill or Stroke Colour. Now redefine the fills/strokes using a Global Swatch by Alt/Opt+clicking the swatch, and checking the 'Global' box. Round the CMYK values up or down to create 'clean' breakdowns, such as c30 m5 y10 k0 not c28.63 m2 y11.7 k0. When using the 'Same' selection function make sure that nothing is missed that looks like it should share the same swatch.



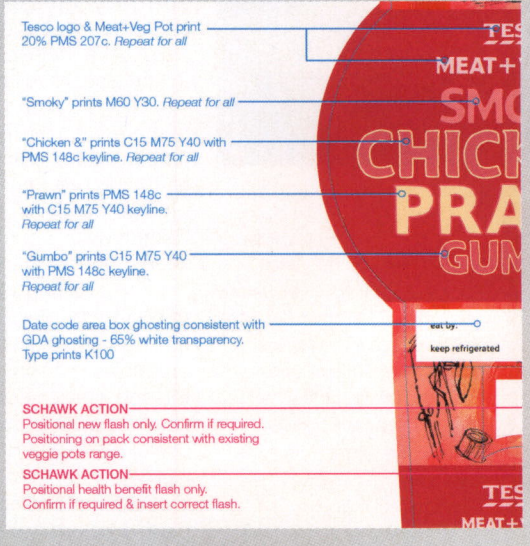

**13**___ Assign all spot colours to one from a Pantone library by going to Window>Swatch Libraries>Colour Books. Change the Swatches panel view to 'Small List' (CS3/4) or 'Name' (CS5). You can quickly see if a colour is set up to print as a spot because it should have an accompanying symbol next to the swatch name.




**14**___ When you've finished, check separations by opening the AI file in Acrobat and go to Advanced>Print Production>Output Preview (CS3/4), or in Illustrator CS5 go to Window>Output>Separations Preview. Work through the separations turning each colour's view on and off to check that the design is separating correctly.




**15**___ Open the original design visual and repeat step 5. Toggle the Visual Only layer's view on and off a few times in the Layers palette – you will immediately notice any discrepancies that may have occurred while creating the design file such as missing or colour changes. If all's well then delete the Visual Only layer and its contents.


Tesco logo & Meat+Veg Pot print 20% PMS 207c. Repeat for all
"Smoky" prints M60 Y30. Repeat for all
"Chicken &" prints C15 M75 Y40 with PMS 148c keyline. Repeat for all
"Prawn" prints PMS 148c with C15 M75 Y40 keyline. Repeat for all
"Gumbo" prints C15 M75 Y40 with PMS 148c keyline. Repeat for all
Date code area box ghosting consistent with GDA ghosting - 65% white transparency. Type prints K100
SCHAWK ACTION
Positional new flash only. Confirm if required. Positioning on pack consistent with existing veggie pots range.
SCHAWK ACTION
Positional health benefit flash only. Confirm if required & insert correct flash.
keep refrigerated

**16**___ Create a new layer at the top of your Layer stack titled 'Mark-up'. Use a standardised font for your comments that's distinct from those used in the design. Emphasise any action points in bold that need addressing at repro stage such as: 'Create 4 Colour Process plus Spot DCS file' or 'Insert correct barcode'. Now you have a complete set of repro-ready artwork with which to create a PDF for client approval.

**01** For years Pearlfisher has given Absolut's range of vodkas a **modern and luxurious feel** with each new flavour introduced

# Pearlfisher

## This transatlantic studio doesn't just design packaging – it studies it like a science. Co-founder Jonathan Ford explains its unique approach

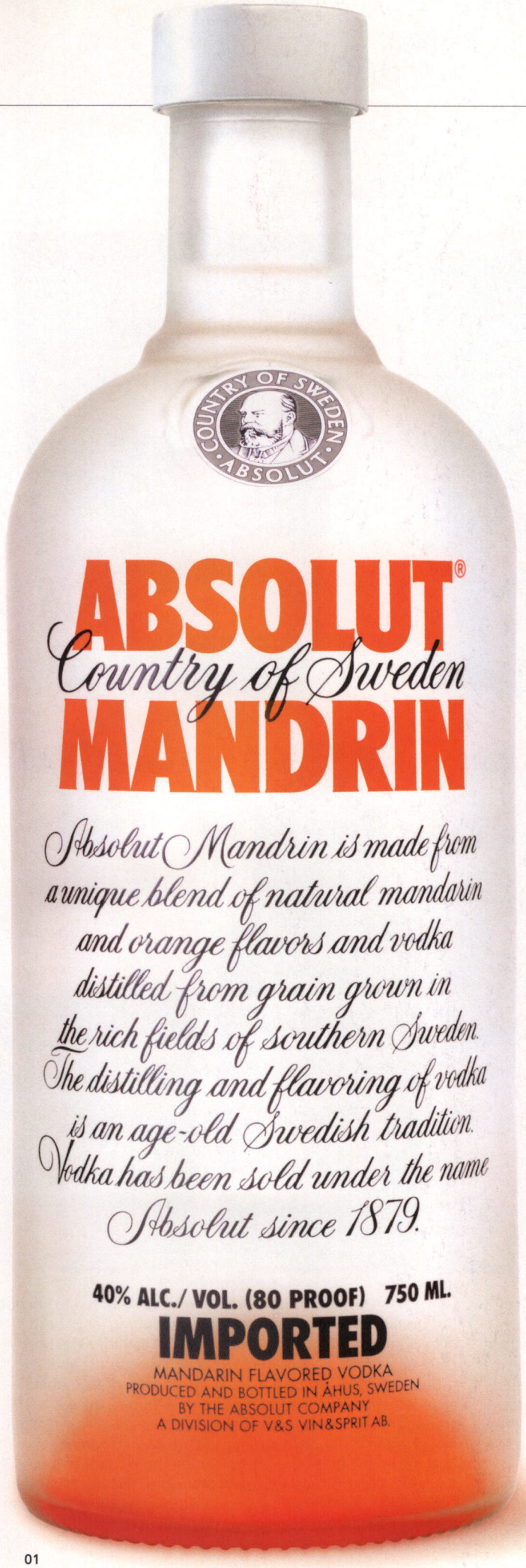
**Jonathan Ford, creative partner**
As one of Pearlfisher's founding members, Ford has become a well-known figure in the global design industry. He is design director of the Design Business Association and previously worked with Michael Peters & Partners in London and New York. He's helped Pearlfisher grow from start-up to its current status, working with some of the world's best-known brands, and still takes a hands-on role in the company's design direction.
www.pearlfisher.com

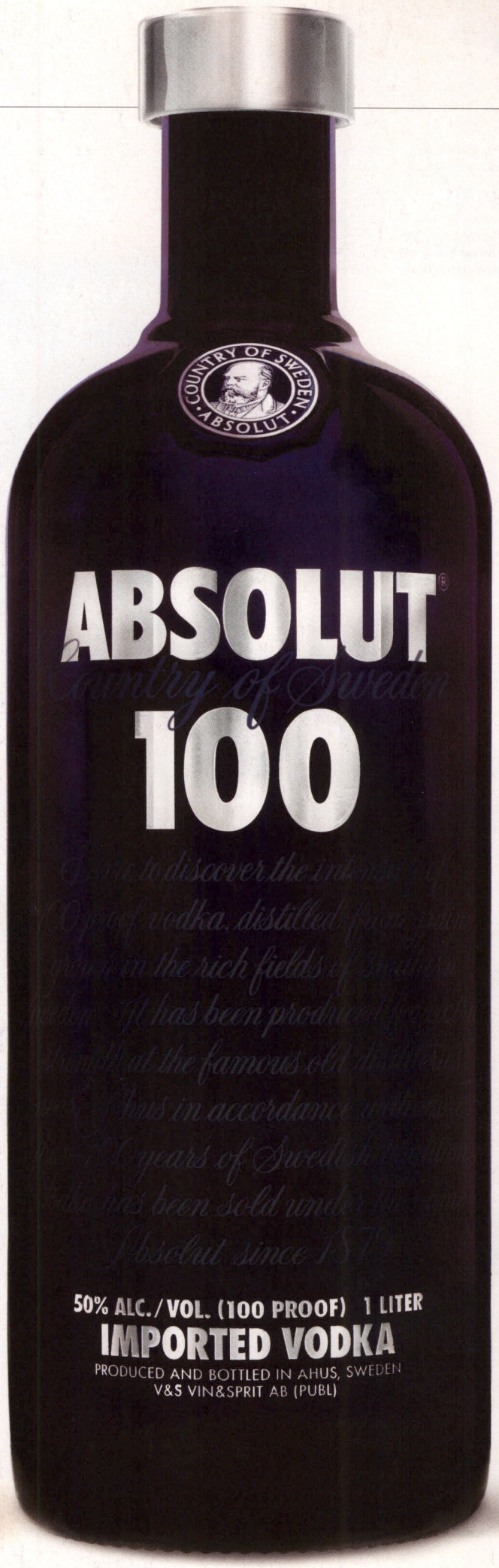
**Can you imagine what it would be like to work at an award-winning packaging design agency like Pearlfisher?** Every time you open the fridge, look in a cupboard or walk into a shop you'll see packaging you've created. If not that, then examples of good and bad packaging by other designers will constantly be catching your eye.

But Pearlfisher co-founder Jonathan Ford loves being continuously switched on to packaging. In fact, he's positively enthused by it. "Design – and packaging – infiltrates and influences every aspect of our daily lives and this is why we believe that we can create a better future by design and, in doing so, have impact right across the board," he says.

Founded in 1992, the company began in London and now also has a growing studio in New York. Cadbury's, Innocent, Stella Artois and Absolut are just a handful of the global brands Pearlfish work with, but they also help small, up-and-coming companies get their retail presence just right. Reflecting this split, the agency divides its portfolio into 'Iconic' and 'Challenger' brands.

Falling into the Iconic category is their recent work for Waitrose, which involved developing a design strategy for the supermarket's Love Life range. The campaign's emphasis is on customers being able to get the most out of life and what they eat. To communicate this, there's a sense of celebration in the look and feel of Pearlfisher's solutions. "The use of photography and colour in the designs is so vibrant. It's a great example of the power of strategic design, and of words that really stand out and reflect the truth of the brand in a pleasurable way," says Ford. →


COUNTRY OF SWEDEN
ABSOLUT
ABSOLUT®
Country of Sweden
MANDRIN
Absolut Mandrin is made from a unique blend of natural mandarin and orange flavors and vodka distilled from grain grown in the rich fields of southern Sweden. The distilling and flavoring of vodka is an age-old Swedish tradition. Vodka has been sold under the name Absolut since 1879.
40% ALC./ VOL. (80 PROOF) 750 ML.
IMPORTED
MANDARIN FLAVORED VODKA
PRODUCED AND BOTTLED IN ÅHUS, SWEDEN
BY THE ABSOLUT COMPANY
A DIVISION OF V&S VIN&SPRIT AB.


COUNTRY OF SWEDEN
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50% ALC./ VOL. (100 PROOF) 1 LITER
IMPORTED VODKA
PRODUCED AND BOTTLED IN AHUS, SWEDEN
V&S VIN&SPRIT AB (PUBL)

01

**02** Why should healthy food make you feel like you're giving something up? Pearlfisher redefined nutritional eating for Waitrose with **a celebration of vibrant colour and photography**

**03** Pearlfisher's Jonathan Ford sees Froosh – a Swedish smoothie product – as **a 'Challenger' brand.** Thanks to Pearlfisher packaging the drink is now a bestseller

Waitrose
LOVE life
2 of your 5 a day = half a pot
low in fat
sweet potato, smoked haddock & spinach
delicately flavoured with a hint of horseradish and lemon
Waitrose
LOVE life
2 of your 5 a day = half a pot
low in fat
red lentil & chilli
wholesome and warming with juicy tomatoes and bulgar wheat

02

03

→ Amongst the Challenger brands in the Pearlfisher portfolio is Froosh, a Swedish smoothie product. Sales have risen 107 per cent since the agency redesigned its packaging and identity, and it is now the best-selling smoothie brand in Scandinavia. A new identity helped differentiate the product in a confusing market and spell out its benefits in a simple, graphical way, with the logotype incorporating fruit imagery.

The agency has also been working with Chinese drinks brand Nongfu Spring, redesigning the premium ready-to-drink Oriental Leaf Tea packaging. Here, the design inspiration revolves around tradition and narrative. Pearlfisher wanted to bring out the richness of Chinese tea culture as well as its long history.

"The illustrations bring the heritage of tea to life but also make it relevant to the modern consumer," says Ford. "The image of the boat on the Oolong Tea signifies the first transport of tea from China to Britain. Structurally and graphically, the new design looks very different from the rest of the market. The lack of shrink-wrapping allows transparency, showing the high quality nature of the product. And the combination of striking imagery and traditional Mandarin text fuses the best of eastern and western styles."

Illustrator is a big part of the creative workflow in both Pearlfisher's studios, and designers use the application for everything from mocking up packaging concepts, to developing logo and branding graphics, and preparing things

**04-05** The Eat range is also one of the 'Challenger' brands in the agency's portfolio. **The name becomes a call to action** on the food packaging

04 05

for print. Packaging designs can be taken into CAD software for preparing dielines, or into Photoshop where pre-visualisations of packaging ideas are rendered.

According to Ford, the atmosphere in both studios is fast-paced and buzzing. "Despite some natural cultural differences between the studios, which I think are beneficial, there is a lot of synergy between the teams in London and New York. We are connected by core ideals and an overarching belief in the power of design to make an impact," he says. "We constantly swap good and bad examples of packaging and are always sharing our inspirations."

While there's a constant flow of inspiration, mixed with the hard work needed to successfully rebrand all kinds of products, staff at Pearlfisher are also given the chance to step back and look at the bigger picture. Twice a year, a so-called 'insight team' comes together to study a particular area of packaging. Recently they looked into the area of food and drink, with Ford speaking on the topic at the Dieline conference in Chicago in June this year. The insight team's findings and the experience of working with Waitrose's Love Life brand fed into his presentation.

"We have a bold vision for the future of taste, going beyond the graphic clichès of ribbons, nostalgia and the 3D Photoshop button," he says. "Ultimately, we need to find and be inspired by new, powerful sensorial and visceral cues that are naturally inherent within food and drink, as well as →

**06** The packaging Pearlfisher designed for Fortnum & Mason's luxury flavoured tea range **resembles antique tea caddies**

**07** Jamie Oliver's own range of food products **is being championed by Pearlfisher**, with a clever, minimalist logo and a whole range of adventures in type, graphics, colour and pattern work

**08** Pearlfisher's packaging for Green & Black's chocolate **shifted the brand's image** from worthy organic goods to luxury premium treat

06

07

08

→ finding new ways to create the iconic or revolutionary visual expression of the future."

The other creatives at Pearlfisher also benefit from the insight team's research. Presentations are put together in the form of films for the design and strategy teams to watch, helping them focus on creating brand and packaging concepts for the future. Perhaps the two most noticeable trends at the moment are the movement towards minimising packaging and its environmental impact, on the one hand, and the rise of special, luxury packaging on the other. It's a world of recyclable egg cartons versus electronic boxes.

As contradictory as they seem, Ford sees the two trends converging. "Generally, eco and sustainable credentials have become integral to the luxury brand offer and expression. The challenge for our industry is to balance the desirability for sustainability with an equally desirable look and feel," he says. "The advances in materials and the supply chain are phenomenal when it comes to choosing the best sustainable routes, and we all need to be responsible for considering the life cycle of brands – from product to packaging to post-consumer recycling."

09

**09** Stella's humorous advertising for its four per cent beer is one thing, but Pearlfisher **gave the products shelf presence** and a look all their own

## Pearlfisher's pro tips for packaging work

### 1 Dielines

"Ultimately, dielines are created in CAD systems. Illustrator, however, does allow us to draw them up in-house and then produce mock-ups that give us guidance on how the finished product will appear," reveals senior digital manager Nat Friskin. "This lets us optimise our designs to specific pack dimensions. This process can also open up new ideas for dielines or pack structures and can then be fed into the final CAD production."

### 2 Special finishes

"Using Illustrator to create printed packaging designs means we can use layers and spot colour swatches. These can be employed to create complex artworks that incorporate a number of different finishes, including varnishes, foils, overprints, debosses and so on. From within the program we can use the designs for multiple purposes, exporting artboards as PDFs as simply as exporting web graphics."

### 3 Print tessellation

"Tessellation is generally done by our pre-press people before a packaging design gets printed and it all depends on sheet size and so on. Illustrator's Step and Repeat or Transform functions are both good tools to use if we are doing this in-house."

### 4 Pre-visualisation

"Generally we use Illustrator to produce mock-ups, and pre-visualisation will be done in Photoshop. However, Illustrator does have some very powerful raster effects as well as mesh blends, perspective grids, 3D extrude and bevel filters. Illustrator allows us to create something very quickly in a freehand style to get the initial idea across, but also has the accuracy to develop the idea to final production."

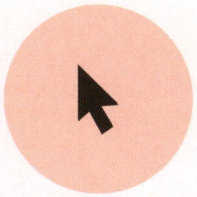
### 5 Delivery for print

"Illustrator is the industry standard tool to use for creating artwork before it goes into pre-press. It has a number of attributes that aid the artwork process. Colour separation and overprint previews allow us to make sure that what we see is what we get, and its interaction with the rest of the CS applications means that the integrated PDF workflow makes our life a lot easier in terms of artwork print management."

# ILLUSTRATOR: THE ULTIMATE TOOL GUIDE

**Illustrator has such a remarkable toolset it's difficult to know where to start.** The Tools panel alone has a plethora of options, with a huge number of flyouts between them – most of which you've probably never used. Over the next eight pages we bring you the ultimate guide to all of these. From the Symbol Stainer to the Stacked Column Graph – every tool that you may have thought superfluous to your needs is explored.

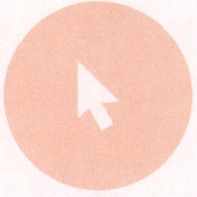
So, keep this handy reference guide on your desk – it will undoubtedly speed up your workflow and hone your Illustrator knowledge.



## SELECTION TOOL

**Keyboard shortcut: V**

The Selection tool, unsurprisingly, enables you to select, move, duplicate (with Alt/Opt), scale and rotate objects, groups or paths in your Illustrator document. If you have smart guides turned on, as you hover over a path – and so on – you get quick feedback in green as to what you're about to select. By holding Ctrl/Cmd, you can quickly change to the Direct Selection tool.



## DIRECT SELECTION TOOL

**Keyboard shortcut: A**

The Direct Selection tool – accessed by hitting the A key or using Ctrl/Cmd with the Selection tool – enables you to edit individual points and paths. For instance, you can drag a path out to alter a shape by clicking and dragging on it in a non-selected state. You can also drag on points for precise editing of objects.

### GROUP SELECTION TOOL

**Keyboard shortcut: Shift+A**

The Group Selection tool probably won't be used that often, but it's a handy way of selecting individual objects within a group and then different groups within your document. Clicking once on an object will select the object, clicking twice will select the group it sits in and clicking a third time will add the next group in your document to your selection. Continue clicking to add more groups.

## MAGIC WAND TOOL

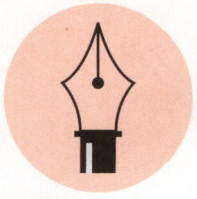
**Keyboard shortcut: Y**

Use the Magic Wand tool to quickly select objects with the same kind of attributes – for instance, the same stroke weight, stroke colour, opacity or blending mode. Double-click the tool to customise it (a panel then appears where you can decide which attributes you want to select). This is a seriously handy tool – even though the Select>Same command gives you a bit more control.

## LASSO TOOL

**Keyboard shortcut: Q**

A simple one, this: drag over single points, a number of anchor points or objects to select them. When you've selected the points, you can use the Control panel to edit accordingly. You won't use it often, but it does offer another way to select points – albeit in a more freehand and less controlled way.



## PEN TOOL

○ **Keyboard shortcut: P**
The standard Bézier drawing tool that you'll find across the Creative Suite. Draw complex objects using points to connect them. Use the Alt/Opt key to change to the Convert Anchor Point tool and then edit the direction of your paths by adjusting the Bézier handles. In addition, the tool will automatically change to the Add Anchor Point tool when hovering over a path and the Delete Anchor Point tool when hovering over a point.

### ADD ANCHOR POINT TOOL

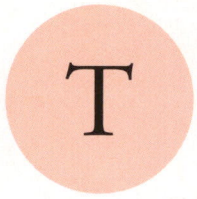
○ **Keyboard shortcut: +**
Use this tool to add anchor points to a path. It's more than likely that you'll just use the Pen tool to add anchor points, but if you prefer this way of working, the option is there.

### DELETE ANCHOR POINT TOOL

○ **Keyboard shortcut: -**
Use this to delete anchor points from your shapes (or just use the Pen tool).

### CONVERT ANCHOR POINT TOOL

○ **Keyboard shortcut: Shift+C**
The Convert Anchor Point tool is an essential drawing tool, enabling you to convert corner points into smooth points (and vice versa). Click and drag on an anchor point to use the tool.



## TYPE TOOL

○ **Keyboard shortcut: T**
Like the equivalents in other Creative Suite apps, Illustrator's Type tool enables you to create type – or a container of type – and edit it using the various typography panels (Character, Paragraph and so on – found under Window>Type) or the Control panel.

### AREA TYPE TOOL

○ **Keyboard shortcut: N/A**
The Area Type tool enables you to select a non-compound, non-masking path and type text inside it. For instance, create a shape using the Pen tool and then change to the Area Type tool, click on the path and then you'll be able to add horizontal text inside the object.

### TYPE ON A PATH TOOL

○ **Keyboard shortcut: N/A**
Create a path using the Pen tool and then use this to create text along it.

### VERTICAL TYPE TOOL

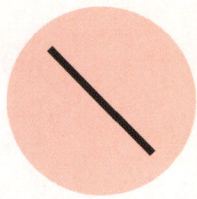
○ **Keyboard shortcut: N/A**
Almost exactly the same as the Type tool, only this one enables you to create vertical text (either by dragging a container or just clicking on the canvas).

### VERTICAL AREA TYPE TOOL

○ **Keyboard shortcut: N/A**
Add vertical type inside an object using this tool.

### VERTICAL TYPE ON A PATH TOOL

○ **Keyboard shortcut: N/A**
Create vertical type along a path using this tool.



## LINE SEGMENT TOOL

○ **Keyboard shortcut: **
Use this to draw individual straight-line segments. Change the stroke and other attributes (like all of these drawing tools) by using the Control panel. Double-click the tool for its options (default length and so on).-

### ARC TOOL

○ **Keyboard shortcut: N/A**
The Arc tool is lovely for drawing concave or convex curves without using the Pen tool. Double-click on the tool to bring up its range of options. Here you can change the length, whether the arc is open or closed, the direction of the arc and the slope. It's a very powerful tool and one that's no doubt underused and undervalued.

### SPIRAL TOOL

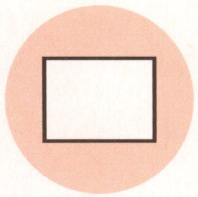
○ **Keyboard shortcut: N/A**
Use this tool to draw clockwise and anti-clockwise spirals. Click and drag to determine size and angle, or single-click on the canvas for more control over the size and shape of your spiral.

### RECTANGULAR GRID TOOL

○ **Keyboard shortcut: N/A**
Want to quickly draw a grid? Use this. Double-click the tool to change size and vertical and horizontal dividers, among other options.

### POLAR GRID TOOL

○ **Keyboard shortcut: N/A**
Use this to create circular grids. Double-click the tool for default size options and to change the number and skew of concentric and radial dividers. You can also choose to fill the grid and create a compound path from the ellipses.



## RECTANGLE TOOL

○ **Keyboard shortcut: M**
Draw a simple rectangle or square using this tool. Change the default size by clicking once on the canvas and changing the options.

### ROUNDED RECTANGLE TOOL

○ **Keyboard shortcut: N/A**
Use this to create rectangles and squares with rounded corners. To change the corner radius, click once on the canvas and enter the required number. You can edit the anchor points of the rounded corners for more control.

### ELLIPSE TOOL

○ **Keyboard shortcut: L**
Quickly create circles and ellipses. Hold Alt/Opt to draw from the centre and Shift to constrain. Click once on the canvas for precise control over the size of your circle or oval.

### POLYGON TOOL

○ **Keyboard shortcut: N/A**
Draw polygons with this tool, altering the number of sides and the size by simply selecting the tool and clicking once on the canvas.

### STAR TOOL

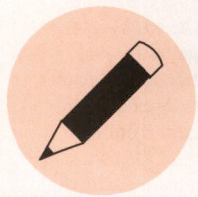
○ **Keyboard shortcut: N/A**
Quickly draw stars with different numbers of points. As with all the drawing tools, you can click once on the canvas to change options (in this case size and number of points), as well as use Shift to constrain proportions and Alt/Opt to draw from the centre for more control over the position of the shape.

### FLARE TOOL

○ **Keyboard shortcut: N/A**
It's not one you'll use very often, but is very handy for adding quick reflections and light effects to your objects. Clicking once on the canvas creates a flare and then enables you to set such options as size, rays, halo and rings. You can also click and drag on the canvas to create a larger flare.

## PAINTBRUSH TOOL

○ **Keyboard shortcut: B**
Use this tool to paint natural-media-like vectors onto your canvas. When used in conjunction with the Brushes panel it gives you a hugely powerful painting setup in which strokes remain infinitely editable without any loss of quality. Double-click the tool itself to change its basic options.



## PENCIL TOOL

○ **Keyboard shortcut: N**
Use the Pencil tool to create freehand paths and objects. Best used with a tablet, obviously. Double-click the tool to access its options.

### SMOOTH TOOL

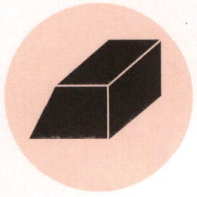
○ **Keyboard shortcut: N/A**
Use this tool to quickly smooth a path – making it a lot straighter, for instance. Click-and-drag along the path to smooth it, and double-click the tool itself to experiment with its options.

### PATH ERASER TOOL

○ **Keyboard shortcut: N/A**
The Path Eraser tool can be used to erase parts of a path. Using it is simple: just drag along the length of the path segment that you want to remove.

## BLOB BRUSH TOOL

○ **Keyboard shortcut: Shift+B**
The Blob Brush enables you to paint using filled shapes rather than paths. Using it, you can quickly create complex objects. Alter the size of the brush on the fly by using the [ and ] keys. It's a great tool when used in conjunction with a Wacom tablet, and feels like you're painting in Photoshop or similar (but with the infinite scalability of vectors).



## ERASER TOOL

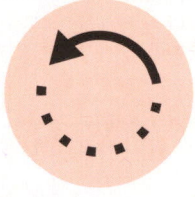
**Keyboard shortcut: Shift+E**
Use this tool like a brush to erase parts of an object. Alter the size and then paint into your objects to remove parts. Make sure you clean up the points of your new shape.

### SCISSORS TOOL

**Keyboard shortcut: C**
Use the Scissors tool to quickly cut sections from a path. Click once at the first point you want to cut and again at the second point. One object will become two separate paths that you can move and edit independently.

### KNIFE TOOL

**Keyboard shortcut: N/A**
The Knife tool enables you to cut objects in half. Simply drag the tool across the object or path. Once you've cut an object, you can then edit the two parts independently.

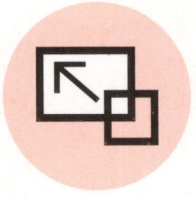


## ROTATE TOOL

**Keyboard shortcut: R**
Use the Rotate tool to quickly rotate objects, paths, groups and multiple selections either freely or at a specified angle by double-clicking on the tool and entering the required rotation angle. You can set the rotation pivot by dragging it on the canvas.

### REFLECT TOOL

**Keyboard shortcut: O**
Use this tool to quickly flip an object over a fixed axis. Double-click to expand the tool's options – you can change the reflection axis and create a copy of the object as you reflect.



## SCALE TOOL

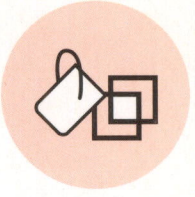
**Keyboard shortcut: S**
You know what this one does – it scales an object around a fixed point (which you can change). You can also use this tool to reflect an object. Double-click the tool to reveal its options, which include choosing between Uniform and Non-Uniform scaling and whether you scale strokes and effects.

### SHEAR TOOL

**Keyboard shortcut: N/A**
Use the Shear tool to skew an object around a fixed point. Click and drag on the object to skew it, or double-click the tool for more precise transformation options.

### RESHAPE TOOL

**Keyboard shortcut: N/A**
The Reshape tool is very neat. It enables you to adjust selected anchor points while keeping the overall detail of the path intact. Select which points you want to edit and then drag the shape. It's great for subtle adjustments that don't affect the overall feel of your object or path.



## LIVE PAINT BUCKET TOOL

**Keyboard shortcut: K**
The Live Paint Bucket tool enables you to quickly paint faces and edges of live paint groups (and convert objects to live paint groups if you haven't already). As you hover over an object, the cursor displays as either one or three coloured squares, which represent the selected fill or stroke colour and, if you're using colours from a swatch library, the two colours adjacent to the selected colour in the library. It's much simpler than it sounds – essentially it enables you to colour up your illustrations very quickly.

### SHAPE BUILDER TOOL

**Keyboard shortcut: Shift+M**
The Shape Builder tool is almost like an interactive Pathfinder, enabling you to quickly merge and extract objects. Simply select the objects you want to merge, select the Shape Builder tool and then drag across the objects. It's worth experimenting with as it can be a very quick way to create complex shapes.

### LIVE PAINT SELECTION TOOL

**Keyboard shortcut: Shift+L**
This tool simply enables you to select Live Paint faces and edges, either individually or by dragging a marquee around the desired objects. To select faces or edges with the same fill or stroke, triple-click an item.

## WIDTH TOOL

**Keyboard shortcut: Shift+W**
Now this is a great tool. If you're after calligraphic effects, where strokes have a variable width, use the Width tool to create that effect. Simply hover over your path, click and drag to change the width of the stroke at that point.

### WARP TOOL
**Keyboard shortcut: Shift+R**
Use the Warp tool to interactively push and pull paths and objects using a brush-based approach, subtly moulding them into the shape you require. Holding down the Alt/Opt key before you start enables you to change the shape and size of the brush you use.

### TWIRL TOOL
**Keyboard shortcut: N/A**
You probably won't use this very often, but when you want to add swirling distortions to an object or path, you'll want to use the Twirl tool. Be careful, as you may end up with a lot of points. Like most of Illustrator's distortion tools, you can hold Alt/Opt to change the brush size and shape, and double-click the tool itself for further options.

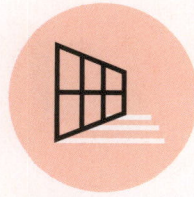
### PUCKER TOOL
**Keyboard shortcut: N/A**
Think of the Pucker tool as an instrument to 'deflate' an object by moving control points towards the cursor. Use Alt/Opt to change the brush size. It's a tool that takes some getting used to, but can be invaluable for minor edits to your objects.

### BLOAT TOOL
**Keyboard shortcut: N/A**
The opposite to the Pucker tool, the Bloat tool 'inflates' an object. Essentially, you can use it to push parts of your object outwards or give them a more rounded feel. When used sparingly, it can be an excellent tool to have at your disposal.

### SCALLOP TOOL
**Keyboard shortcut: N/A**
This adds random inward curves to the edges of your objects: it's essentially for roughening up your shapes. Change the brush size by holding Alt/Opt before you use the tool – and then experiment with what size works best.

### CRYSTALLIZE TOOL
**Keyboard shortcut: N/A**
The opposite of the Scallop tool, this adds random spiked detail to the edges of your shapes. Again, it can be great for roughening up an object.

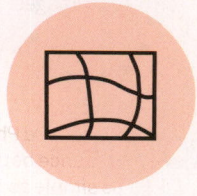
### WRINKLE TOOL
**Keyboard shortcut: N/A**
Also used for roughening up the edge of an object, the Wrinkle tool adds, er, wrinkles to the edges of your shapes. Experiment with brush sizes and remember that holding Alt/Opt enables you to change the brush size, and holding Shift as well constrains the shape of the brush.



## PERSPECTIVE GRID TOOL

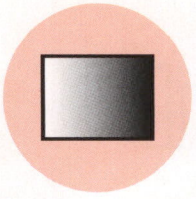
**Keyboard shortcut: Shift+P**
This useful tool makes it very easy to create isometric illustrations (or just those with the correct perspective without worrying about setting up your own vanishing points). After selecting the tool, click on the canvas to bring up the grid and edit it using the points on each axis. Click on the grid you want to draw on and begin drawing. Everything will match up to your grid. To get rid of the grid go to View>Perspective Grid>Hide Grid.

### PERSPECTIVE SELECTION TOOL
**Keyboard shortcut: Shift+V**
Once you've created your objects in perspective, you might want to select, move and transform them. In order to do this, use the Perspective Selection tool. Just drag an object and it will move in perspective. If you want to move it out of perspective, use the normal Selection tool.



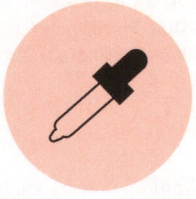
## MESH TOOL

**Keyboard shortcut: U**
A great tool, but one that's tricky to master. The Mesh tool enables you to construct highly realistic vector images – skin or metal, for instance – using a number of points to blend colour together. First create an object, and then within that object begin selecting colour and using the Mesh tool to add the colour at certain points. Continue to build up subtle variations by adding points next to each other with slightly different colours. It's not easy to get right, but can yield some incredible results.



## GRADIENT TOOL

**Keyboard shortcut: G**
Use this in conjunction with the Gradient panel to create linear or radial gradients. You can click-and-drag across an object to define its gradient fill and then interactively edit that gradient using the slider that appears.

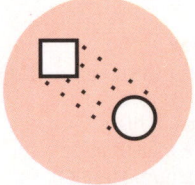


## EYEDROPPER TOOL

**Keyboard shortcut: I**
Use the Eyedropper to copy appearance attributes between objects in your Illustrator document. Double-clicking the tool enables you to specify which attributes you can copy. You can also use it to sample colours from raster images.

### MEASURE TOOL

**Keyboard shortcut: N/A**
Use this, as in InDesign and Photoshop, to measure the distance between two points. It's as simple as that.



## BLEND TOOL

**Keyboard shortcut: W**
The Blend tool is used to blend objects together. Just drag from one selected object to another with the tool. Make every part of your blend editable by going to Expand in the Object menu and then ungrouping.

## KEYBOARD SHORTCUTS

# Illustrator CS5.5

### TOOLS

| | |
|---|---|
| Selection | V |
| Direct Selection | A |
| Group Selection | Shift+A |
| Magic Wand | Y |
| Lasso | Q |
| Pen | P |
| Add Anchor Point | + |
| Delete Anchor Point | - |
| Convert Anchor Point | Shift+C |
| Type | T |
| Line Segment | \ |
| Rectangle | M |
| Ellipse | L |
| Paintbrush | B |
| Pencil | N |
| Blob Brush | Shift+B |
| Eraser | Shift+E |
| Scissors | C |
| Rotate | R |
| Reflect | O |
| Scale | S |
| Width | Shift+W |
| Warp | Shift+R |
| Free Transform | E |
| Shape Builder | Shift+M |
| Live Paint Bucket | K |
| Live Paint Selection | Shift+L |
| Perspective Grid | Shift+P |
| Perspective Selection | Shift+V |
| Mesh | U |
| Gradient | G |
| Eyedropper | I |
| Blend | W |
| Symbol Sprayer | Shift+S |
| Column Graph | J |
| Artboard | Shift+O |
| Slice | Shift+K |
| Hand | H |
| Zoom | Z |
| Toggle Fill/Stroke | X |
| Default Colours | D |
| Swap Fill/Stroke | Shift+X |
| Colour | , |
| Gradient | . |

### VIEW

| | |
|---|---|
| Toggle Screen Mode | F |
| Show/Hide All Palettes | Tab |
| Increase/Decrease Diameter | ]/[ |
| Toggle Drawing Mode | Shift+D |

### FILE

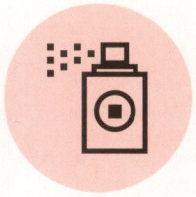
| | |
|---|---|
| Units | Ctrl/Cmd+, |
| Other Script | Ctrl/Cmd+F12 |

### EDIT

| | |
|---|---|
| Paste in Front/Back | Ctrl/Cmd+F/B |
| Paste in Place | Ctrl/Cmd+Shift+V |
| Paste on All | Alt/Opt+Shift+Ctrl/Cmd+V |
| Colour Settings | Shift+Ctrl/Cmd+K |

### OBJECT

| | |
|---|---|
| Transform | Ctrl/Cmd+D |
| Move | Shift+Ctrl/Cmd+M |
| Bring to Front | Shift+Ctrl/Cmd+] |
| Bring Forward | Ctrl/Cmd+] |
| Send Backward | Ctrl/Cmd+[ |
| Send to Back | Shift+Ctrl/Cmd+[ |
| Group | Ctrl/Cmd+G |
| Ungroup | Shift+Ctrl/Cmd+G |
| Unlock All | Alt/Opt+Ctrl/Cmd+2 |
| Join | Ctrl/Cmd+J |
| Join Average | Alt/Opt+Ctrl/Cmd+J |
| Make | Alt/Opt+Ctrl/Cmd+B |
| Release | Alt/Opt+Ctrl/Cmd+Shift+B |
| Make with Warp | Alt/Opt+Ctrl/Cmd+Shift+W |
| Make with Mesh | Alt/Opt+Ctrl/Cmd+M |
| Make with Top Object | Alt/Opt+Ctrl/Cmd+C |
| Edit Contents | Shift+Ctrl/Cmd+P |
| Make Clipping Mask | Ctrl/Cmd+7 |
| Release Clipping Path | Alt/Opt+Ctrl/Cmd+7 |
| Make Compound Path | Ctrl/Cmd+8 |



## SYMBOL SPRAYER TOOL

**Keyboard shortcut: Shift+S**
The Symbol Sprayer tool, used with the Symbols panel, enables you to 'spray' multiple instances of a symbol onto the artboard. You can then, using the tools in the flyout, edit these instances. It's handy for graphics that need to be repeated but all look slightly different (a shoal of fish, for instance).

### SYMBOL SHIFTER TOOL
**Keyboard shortcut: N/A**
Use the Symbol Shifter tool to move symbol instances around the artboard. Click and drag on the symbols to shift the instances around.

### SYMBOL SCRUNCHER TOOL
**Keyboard shortcut: N/A**
By clicking and holding or dragging, this tool enables you to move symbol instances either closer to each other – or by holding Alt/Opt – further away from one another.

### SYMBOL SIZER TOOL
**Keyboard shortcut: N/A**
This enables you to make instances bigger or (by holding Alt/Opt) smaller. Just click-and-hold on an instance, or drag across to make changes to more than one instance at once.

### SYMBOL SPINNER TOOL
**Keyboard shortcut: N/A**
Use this tool to rotate symbol instances. An arrow appears over each instance when you click-and-hold to show the angle of rotation.

### SYMBOL STAINER TOOL
**Keyboard shortcut: N/A**
The Stainer tool is great for making sure your instances have a different colour. Choose a colour from the Swatches panel and click on the symbol instances. The closer the instance to the centre of the tool, the more it is colourised. Great for quick colour edits.

### SYMBOL SCREENER TOOL
**Keyboard shortcut: N/A**
Like the Stainer tool, but applies opacity to the instance of a symbol. Again, the closer the instance to the centre of the tool when you click (or the longer you hold over an instance), the more transparent the instance becomes. It's very intuitive.

### SYMBOL STYLER TOOL
**Keyboard shortcut: N/A**
Using the Symbol Styler tool you can quickly apply a style – as specified in the Styles panel – to an instance of a symbol. It's hugely powerful.

## COLUMN GRAPH TOOL

**Keyboard shortcut: J**
Use this tool to create a standard bar chart or column graph that compares values using vertical columns next to each other. Click-and-drag and then enter or import your data.

### STACKED COLUMN GRAPH TOOL
**Keyboard shortcut: N/A**
Similar to the Column Graph tool, but creates a bar chart that compares values by having columns stacked on top of one another instead of side-by-side. This type of graph is useful for showing the relationship of parts to the total.

### BAR GRAPH TOOL
**Keyboard shortcut: N/A**
This is exactly the same as the Column Graph tool, but creates a graph with horizontal bars, instead of vertical.

### STACKED BAR GRAPH TOOL
**Keyboard shortcut: N/A**
Exactly the same as the Stacked Column Graph tool, but creates a chart with the bars running horizontally.

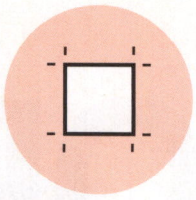
### LINE GRAPH TOOL
**Keyboard shortcut: N/A**
Use this to create a graph that shows the trend of one or more subjects over time. It's the kind of graph you'd see for sales figures or stocks, usually.

### AREA GRAPH TOOL
**Keyboard shortcut: N/A**
Similar to the Line Graph tool, but enables you to create a filled graph that emphasises totals as well as values.

### SCATTER GRAPH TOOL
**Keyboard shortcut: N/A**
Use this tool to create a scatter graph. Click-and-drag and enter the data.

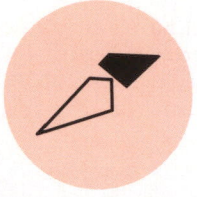
### PIE GRAPH TOOL
**Keyboard shortcut: N/A**
Use this tool to create a standard pie chart. Once done, use the Direct Selection tool to select and colour segments.

### RADAR GRAPH TOOL
**Keyboard shortcut: N/A**
Also called 'web graphs', radar graphs compare sets of values at given points in time or in particular categories. Use this tool to quickly create one.



## ARTBOARD TOOL

**Keyboard shortcut: Shift+O**
Use this tool to create new artboards, and then scale them and move them around the document window. You can also delete an artboard by hitting the cross icon at the top-right.



## SLICE TOOL

**Keyboard shortcut: Shift+K**
By clicking and dragging with this tool you can create slices for when exporting web graphics.

### SLICE SELECT TOOL

**Keyboard shortcut: N/A**
Use this tool to select and move slices. As you move a slice, the others adjust to fit around it.

## HAND TOOL

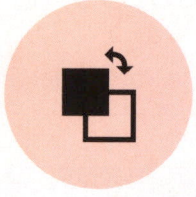
**Keyboard shortcut: H**
It's more likely that you'll simply use the Spacebar than selecting this tool, but if you want to, this is the tool you select to pan around your document.

### PRINT TILING TOOL

**Keyboard shortcut: N/A**
Used in conjunction with the Artboard tool, this tool enables you to specify the printable area of your document and tile your prints.

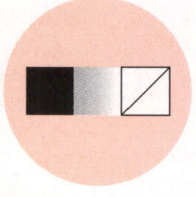
## ZOOM TOOL

**Keyboard shortcut: Z**
Zoom in and out of your document. Hold the Alt/Opt key to zoom out. You can also use the field at the bottom of the document to quickly zoom to a precise magnification.



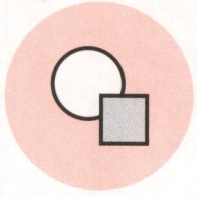
## FILL AND STROKE

Shows you the current fill and stroke colours. Hit D to specify the default options (white fill, black stroke) and X to swap between fill and stroke. You can hit Shift+X to swap the fill and stroke colours.



## COLOR, GRADIENT, NONE

**Keyboard shortcut: , and .**
Quickly change the attributes of a selected object to colour it, give it a gradient or nothing. This will affect the stroke or fill, depending on what you have selected.



## DRAW NORMAL

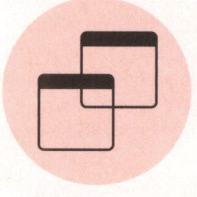
**Keyboard shortcut: Shift+D to switch modes**
Draw in Normal mode, with new objects appearing on top of objects on the artboard.

### DRAW BEHIND

With this selected, new objects appear behind objects already on the artboard. You can send objects back of course, but you don't need to if this is selected.

### DRAW INSIDE

Only enabled when you have an object selected, the Draw Inside mode enables you to draw inside other objects, creating a clipping mask. This mode is handy for making quick edits to shapes and retaining editability without the hassle of setting up clipping masks. Just remember to switch back to Draw Normal when you're done.

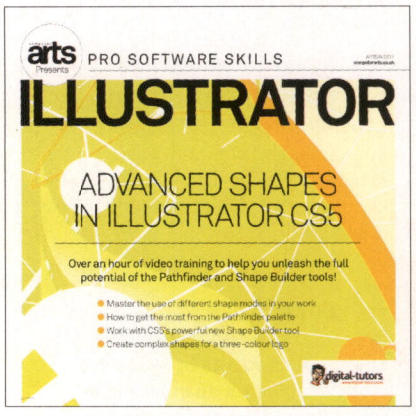


## CHANGE SCREEN MODE

**Keyboard shortcut: F**
Switch between Standard Screen Mode, Full Screen with Menu Bar, and Full Screen Mode. You can cycle through modes using the F key.

computer arts Presents

# PRO SOFTWARE SKILLS ILLUSTRATOR

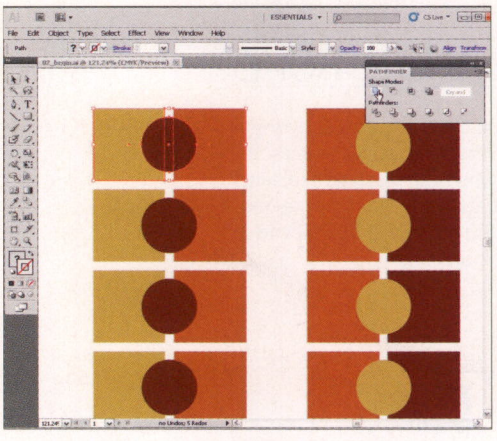

arts Presents
PRO SOFTWARE SKILLS
ILLUSTRATOR
ADVANCED SHAPES IN ILLUSTRATOR CS5
Over an hour of video training to help you unleash the full potential of the Pathfinder and Shape Builder tools!
Master the use of different shape modes in your work
How to get the most from the Pathfinder palette
Work with CS5's powerful new Shape Builder tool
Create complex shapes for a three-colour logo
digital-tutors

**Unleash the full potential of Illustrator CS5's advanced shape building tools and work faster and smarter.** This pro video lesson from the experts at Digital-Tutors focuses on both the Pathfinder panel and Illustrator's new Shape Builder tool: after completing the course, you'll be better equipped to integrate these powerful tools into your workflow.

Elsewhere on the disc you'll find plenty of resources to aid your day-to-day designing, including a wide selection of useful plug-ins – not to mention an inspiring selection of work in the Galleries section.

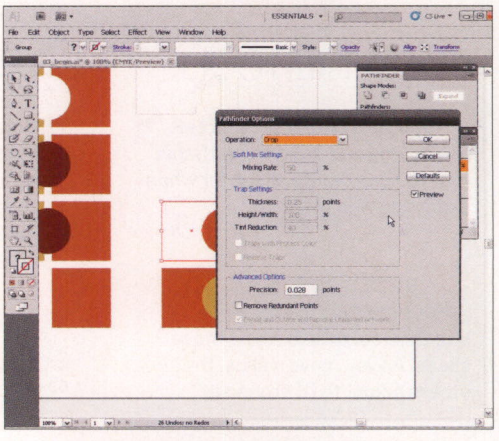
## ADVANCED SHAPES IN ILLUSTRATOR CS5: EXCLUSIVE VIDEO TUITION

Get more from the Pathfinder and Shape Builder with Digital-Tutors



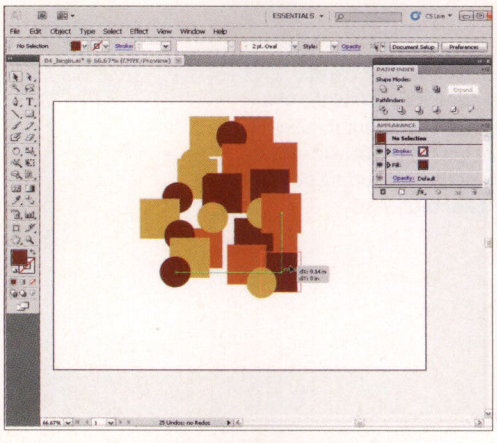
### Pro's guide to Shape Modes

How to make the different Shape Mode options in the Pathfinder palette work harder for you



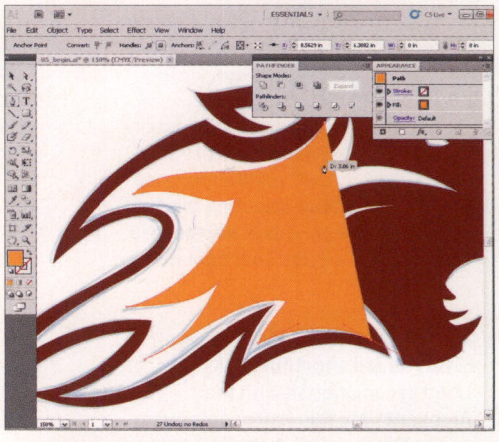
### Get more from the Pathfinder

Everything you ever needed to know about Illustrator's Pathfinder panel – and more



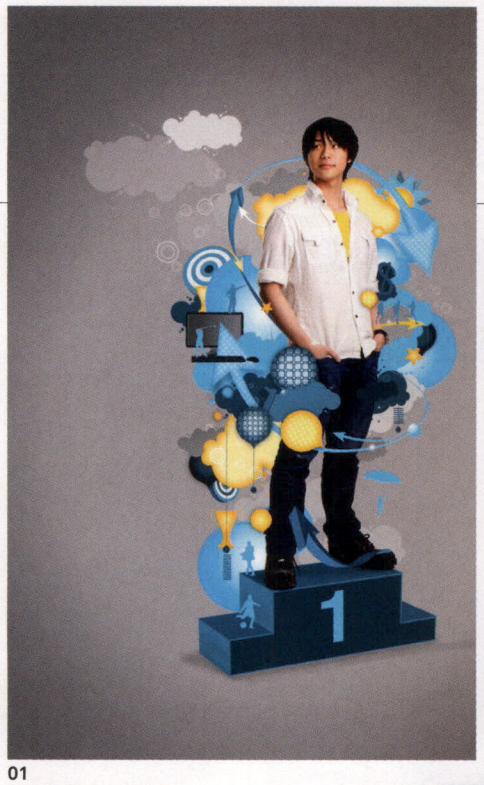
### Master the Shape Builder tool

Create complex shapes by merging and erasing simpler shapes with this useful tool, new to CS5



### Apply these tools to a logo design

Put your skills to the test by creating a complex three-colour logo design



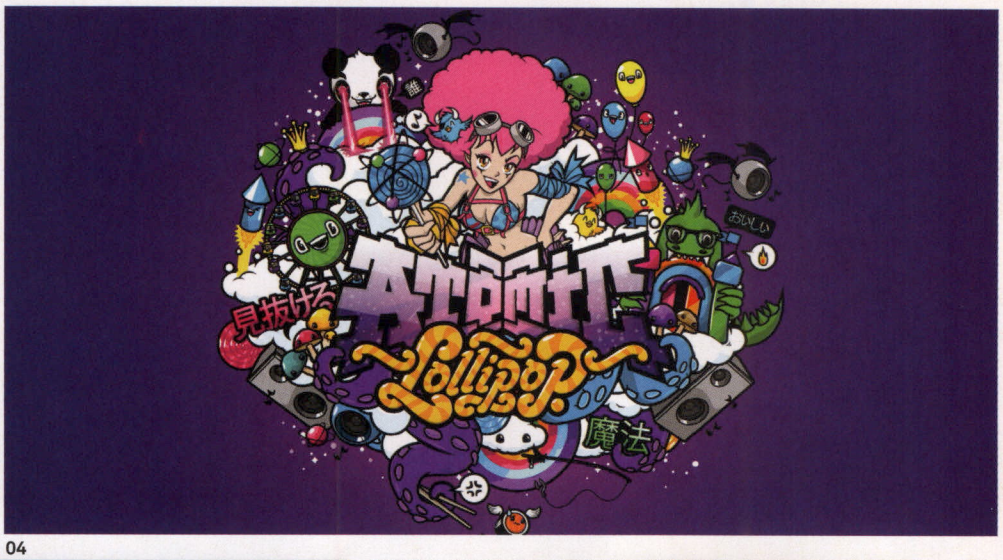

01

**01–02** Striking images from prolific illustrator **Radim Malinic** – AKA Brand Nu – sit alongside vibrant work from **Karan Singh** in the Galleries selection

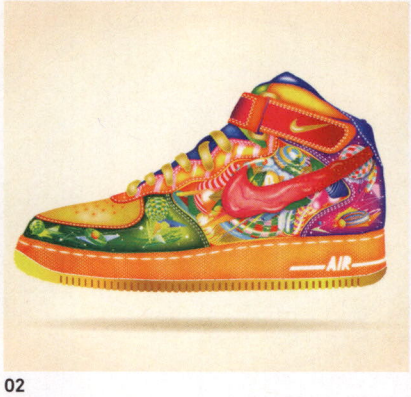
**03** You've read about his creative process and picked up his grid-based typography tips on page 78 – now see more of **Steven Bonner**'s great work in Galleries

**04–05 Jared Nickerson** also features in our Galleries section on your disc, with a healthy selection of impressive character work from the last few months

**06** You'll find a range of on-trend logo projects from **Gardner Design** on your disc. Don't miss our in-depth profile with its founder Bill Gardner on page 82




04




02

03

05

## GALLERIES

### Radim Malinic
Portfolio highlights from the award-winning illustrator, designer and art director

### Karan Singh
The Melbourne-based illustrator presents some of his favourite recent projects

### Steven Bonner
See the latest work from this long-time *Computer Arts* collaborator

### Jared Nickerson
The Seattle-based illustrator shows off his exceptional vector character style

### Bill Gardner
Slick identity work from Gardner Design, headed up by LogoLounge founder Gardner

## RESOURCES

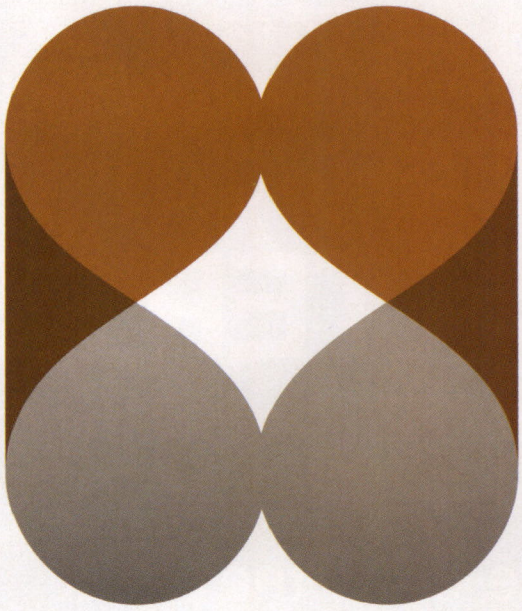
### ArtOptimizer
Automatically reduce the size of images linked to your Illustrator documents

### Illustrator training files
All the files that you need to complete the Advanced Shapes in Illustrator CS5 tuition

### Phantasm CS (demo)
Features colour adjustment, embedded image handling and essential pre-press tools

### Scriptographer
Create mouse-controlled drawing tools and more with this scripting plug-in

### Xtream Path (demo)
Drag, stretch, push and pull paths in Illustrator for more flexible path editing



06

Master high-end skills in every creative field!
On sale
Tuesday 27 September in the UK...
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PRO SOFTWARE SKILLS
AFTER EFFECTS
Master the art of the moving image with our pro guide to motion graphics and animation
Pre-order the set at
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computer arts Presents

PRO SOFTWARE SKILLS

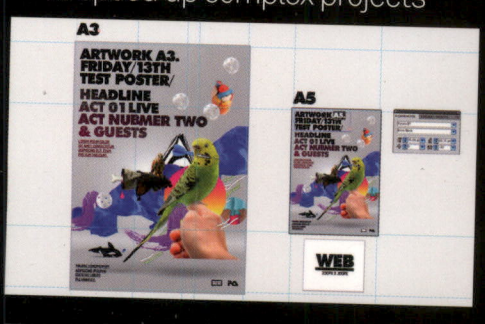
# ILLUSTRATOR

## Work faster and smarter in Illustrator...

### Expert guides

- Save time by integrating **symbols and custom brushes** into your usual illustration workflow

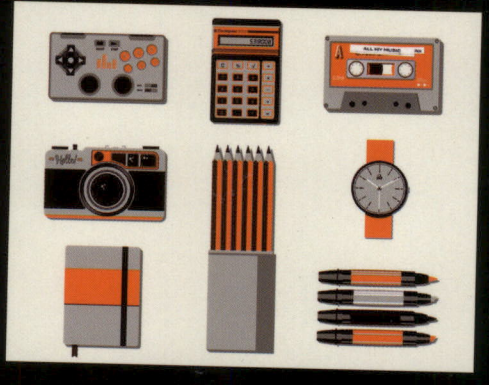
- Refine your skills and get more from **paths and Bezier curves**
- Unleash the full potential of the **Pathfinder palette**, plus CS5's new Shape Builder tool
- Work across **multiple artboards** to speed up complex projects




- Master Illustrator's many **Effects**

### Ultimate inspiration

- LogoLounge founder **Bill Gardner** discusses the hottest logo trends, and reveals his creative approach
- Behind the process at leading packaging agency **Pearlfisher**
- With clients including *Wired*, *GQ* and Cadbury's, **Steven Bonner** shares his Illustrator prowess

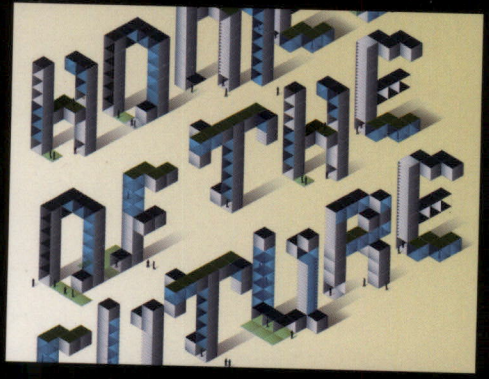


- **Jared Nickerson** on the secrets of great vector character work

### Pro techniques

- All-new ways to **make Illustrator work harder** for your needs
- Master **inner glow** effects in your illustration

- 50 time-saving tips for refining your **packaging design** workflow
- Use a **bespoke isometric grid** to create conceptual type



- Refine your **logo design** process with 50 nuggets of expert advice
- Create versatile, **eye-catching vector patterns** for any surface

- Pro guidance for getting a **dieline** ready for production